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CONFERENCE REGARDING RESTRICTIONS ON  
IMPORTATION OF NARCISSUS AND CERTAIN  
OTHER BULBS

Befor United States Department of  
Agriculture.

Washington, D. C., (New National  
Museum) November 16 and 17, 1925.

(Vol. I, pp. 1-228, Nov. 16, 1925; and  
Vol. II, pp. 229-434, Nov. 17, 1925)

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(Copy)

U. S. DEPARTMENT OF AGRICULTURE  
Office of the Secretary  
Press Service

October 15, 1925.

BULB CONFERENCE CALLED

A conference to afford opportunity for a full reconsideration of the restrictions on the entry of narcissus and certain other bulbs authorized nearly three years ago to become effective January 1, 1926, will be held by the Department of Agriculture at Washington at 10 o'clock, Monday, November 16, the department announced to-day. As pointed out recently, these restrictions have been the subject of wide discussion, both favorable and adverse. The Secretary of Agriculture, therefore, authorized a thorough review of the situation and the assembling of all available information. The results of this investigation will be presented at the conference, which will be open to all persons interested.







## LIST OF PERSONS IN ATTENDANCE.

NAME	BUSINESS	ADDRESS
Dunlap, R.W.	Asst. Sec. of Agr.	U. S. D. A.
Marlatt, C.L.	Chrmn., Fed. Hort. Bd.	" " "
Oakley, R.A.	Vice-Chrmn., Fed. Hort. Bd.	" " "
Sudworth, Geo.B.	Member, Fed. Hort. Bd.	" " "
Waite, M.B.	" " " "	" " "
Sasscer, E.R.	Entomologist & Exec. Officer, Fed. Hort. Bd.	" " "
Althouse, R. C.	Asst. to the Chrmn., Fed. Hort. Bd.	" " "
-----		
Abernethy, C.L.	Member Congress, 3rd Dist. of North Carolina	New Berne, N.C., Raleigh Hotel, Wash., D.C.
Adams, J.M.R.	Fed. Hort. Bd.	U. S. D. A.
Allenson, H.E.	Bur. of Plt. Ind.	"
Allen, S.C.	Seeds and Bulbs	Portland, Me.
Anderson, G.E.	Supt.; Rep. Nat'l. Asso. of Gardeners	Twin Oaks, Wash., D.C.
Applegate, Miss I.K.	Garden Lover	286 5th Ave., N.Y. Foxcroft, Middleburg, Va.
Appleton, Mrs. S.A.	Warrenton Garden Club	Warrenton, Va.
Arentshorst, H.J.	Vice-Pres., Holland Bulb Exporters Asso.	Haarlem, Holland
Arzberger, E.G.	Bur. Plt. Ind.	U. S. D. A.
Baker, A.C.	Bur. Ent.	"
Baller, L.	General Bulb Co.	168 N. Mich. Ave., Chicago, Ill., and Vogelnsang, Holland.



Bancroft, Mrs. H.	Pres., Garden Club of Wilmington, Del.	2409 Willard St., Wilmington, Del.
Barker, Mrs. L.F.	Former Cor. Sec. Ama- teur Gardeners' Club of Baltimore (G. C. of A.)	208 Stratford Row, Baltimore, Md.
Barron, L.	Horticultural Editor and Author	Garden City, N.Y.
Barton, Mrs. B.W.	Garden Club of America	Pikesville, Md.
Barton, Mrs. D.W.	Hardy Garden Club of Ruxton	Ruxton, Md.
Bayard, Mrs. T.F.	Member at Large, G. C. of A.	1401 - 16th St., Wash., D.C.
Beattie, R.K.	Fed. Hort. Bd.	U. S. D. A.
Beattie, W.R.	Bur. Plt. Ind.	"
Beck, Mrs. J.M.	Rumson Garden Club	1624 21st St., Wash., D.C.
Beirne, Miss M.McD.	Garden Club of America	Ashland, Va.
Bell, Mrs. H.B.	Hardy Garden Club	Ruxton, Md.
Bennett, J.B.	U.S. Chamber Commerce	Wash., D.C.
Bevan, Mrs. W.F.	Amateur Gardener, Hardy Garden Club of Ruxton	Ruxton, Md.
Bickley, M.H.	Bickmore Greenhouses	Wallingford, Pa.
Bisset, P.	Bur. Plt. Ind.	U. S. D. A.
Blanding, A.H.	Production Mgr., Fla. Citrus Exch.; Member State Plant Board	Tampa, Fla.
Boet, D.	Bulb Grower	Castle Hayne, N.C.
Boyd, J.	Pa. Hort. Society	1600 Walnut St., Phila., Pa.
Boylan, E.A.	Vaughan's Seed Store, Seedsman & Bulb Im- porters	130 N. Randolph St., Chicago; & 47 Bar- clay St., N.Y.
Bremond, M.	Exporter, Cooperative de Prod. de Bulbes	Ollioules (var) France
Brooke, Mrs. F.H.	G. C. of A., Farm & Garden Associate	1737 K St., Wash. D. C.
Brown, T.A.	County Agent for Vo- lusia County	DeLand, Fla.
Bruman, A.J.	Fed. Hort. Bd.	U. S. D. A.
Buis, P.	Bulb Grower	Castle Hayne, N.C.
Burdett, J.H.	Adv. Mgr., Vaughan's Seed Store	10 W. Randolph St., Chicago, Ill.





Burnett, S.	Burnett Bros., Inc., Seedsmen	92 Chambers St., N.Y.
Burrage, A.C.	Lawyer; Pres., Mass. Hort. Soc.; Pres., Amer. Orchid Society	85 Ames Bldg., Boston, Mass.
Bussey, T.N.	Bulb Grower	Clermont, Fla.
Caldwell, Mrs. J.E.	"The Gardeners" Mem- ber of G. C. of A.	Bryn Mawr, Pa.
Campbell, W.G.	Dir., Regulatory Work	U. S. D. A.
Cannon, C.	Member Congress, 9th Dist. of Missouri	433 House Of- fice Bldg., Wash. D.C.
Cardwell, G.A.	Agr. and Ind. Agt., A. C. L. R. R. Co.	Wilmington, N.C.
Carmichael, D.	J.M. McCulloughs Sons Co., Seedsmen	Cincinnati, O.
Cathie, H.G.	Rep. Fiske Seed Co., Seedsmen	12 Faneuil Hall Sq., Boston, Mass.
Chalfant, F. McC.	Garden Club of America	308 E. North Ave., Pittsburgh, Pa.
Chapin, E. A.	Zoologist	East Falls Church, Va.
Chase, H.B.	Nurseryman	Chase, Ala.
Clark, G.D.	Seeds, Plants and Bulbs	1306 Spring Garden St., Phila., Pa.
Close, C.P.	Extension Service	U. S. D. A.
Cobb, N.A.	Bur. of Plt. Ind.	"
Connor, B.	"	"
Copeland, Mrs. C.	Garden Club of Wil- mington	Wilmington, Del.
Corbett, L.C.	Bur. of Plt. Ind.	U. S. D. A.
Cory, E. F.	State Entomologist	College Pk., Md.
Courtney, O.K.	Fed. Hort. Bd.	U. S. D. A.
Crichton, D.J.	Prof. Gardener (Est. of Mrs. Paul Moore)	Hollow Hill Farm, Convent, N.J.
Crowninshield, Mrs. F.B.	Amateur Grower	Locagrande, Fla.
Curry, C. P.	Member Congress, 3rd Dist. of California	Sacramento, Cal.
Danker, F.A.	Florist, Rep. Albany Florist Club.	Albany, N.Y.
Darling, H.C.	Sales Mgr., De-Bay Farms	Bridgeton, N.J.
Dauer, W.F.	Meyer Seed Co.	Baltimore, Md.
Dean, H.S.	Fed. Hort. Bd.	U. S. D. A.
Dearing, C.	Supt. State Agr. Exp. Sta. & Test Farm	Willard, N.C.





DeBruyn, H.	Rep. L. van Leeuwen & Son, Bulb Growers and Exporters	Sassenheim, Holland 111 Broad St. N.
DeGroot, J.	Bulb Grower, Rep. the United Bulb Gr., Inc., of Sassenheim Holland	Catonsville, Md.
Denison, I. I.	U.S. Chamber Commerce	Wash. D.C.
Dennis, Mrs. J. M.	Hardy Garden Club of Ruxton	Ruxton, Md.
Derick, G. R.	J. Bolgiano Seed Co.	Balti, Md.
Dewar, A. P.	R. & J. Farquhar Co., Seeds- men and Nurserymen	Boston, Mass.
Dieckmann, H.	Floriculture Student, University of Md.	Elm Grove, Wheeling, W. Va.
Diedrich, R. H.	Leermance Stg. & Ref. Co.	313 Greenwich St., N. Y.
Dildine, F. H.	Importer and Dealer	1058 Harvard St. Rochester, N. Y.
Dirkmaat, J.	Rep. Van Zonneveld Bros. & Philippe, Bulg Importers	29 Broadway, N. Y.
Dorst, Mrs. J. H.	Warrenton Garden Club	Warrenton, Va.
Drake, Mrs. W. F.	Sec.-Treas. Warrenton Garden Club, G. C. of A., Farmer	Humblestone, Warrenton, Va.
Drane, H. J.	Member Congress, 1st District of Fla.	Lakeland, Fla.
Dudley, Mrs. A.	Member of Fauquier & Loudoun Garden Club	Middleburg, Va.
Dudley, A.	Farmer	" "
Dudley, Mrs. T. U.	Member of Fauquier & Loudoun Garden Club	" "
duPont, Mrs. Irene	Garden Club of Wilmington	Granogue, Del.
duPont, Mrs. Pierre	Amateur Grower	Filmington, Del.
duPont, Mrs. F. W.	Private Gardener	Box 52, Filmington, Del.
Easdie, Mrs. C. A.	Farmer and Gardener	Plainfield, N. J.
Ebel, Dorothy	Sec. Nat'l. Assn. of Gardeners	286 Fifth Ave., N. Y.
Edminster, A. W.	Rep. Florists Exchange	New York City
Edson, Mrs. J. J. Jr.	Garden Club, Allegheny County	Sewickley, Pa.
Eisele, J. D.	Pres., Henry A. Dreer	Phila., Pa.
Elliott, R. F.	Pres., Elliott Nursery Co.	Pittsburgh, Pa.



Fell, Mrs. E.N.	Warrenton Garden Club	Warrenton, Pa.
Fields, W.S.	Fed. Hort. Bd.	U. S. D. A.
Fisher, J.H.	Lapark Seed & Plant Co., Pub. Parks Floral Maga- zines	Lapark, Pa.
Flemer, Wm. Jr.	Princeton Nurseries	Princeton, N.J.
Fletcher, D.U. (Rep. U. S. Senator, Florida by his Sec. F.L. Hill)		337 S. O. Bldg., Wash. D. C.
Fletcher, Mrs. G.L.	Warrenton Garden Club	Warrenton, Va.
Free, A.M.	Member Congress, 8th District of Calif.	Washington, D.C.
Friedmann, H. H.	Personal rep. of Mr. C.W. Kress, owner of Buckfield Plantation, Yemassee, S.C., Bulb Grower and Farmer	32 Nassau St., N. Y.
Gail, Mrs. G.F.	Hardy G. C. of Ruxton	Ruxton, Md.
Gardner, Mrs. G.H.		Gates Mill, Cleve., O.
Gardner, R.O.	Rep. Jos. Breck & Sons Corp.	85 State St., Boston, Mass.
Gest, Mrs. Wm.P.	The Gardeners; Member of G. C. of A.	Merion, Pa.
Gittings, Miss M.S.	Member of Harford Co. Garden Club	231 W. Preston St., Balti- more, Md.
Gouldman, H. Y.	Fed. Hort. Bd.	U. S. D. A.
Graf, J. E.	Bur. of Eng.	
Graham, Wm. A.	Com. of Agr., N.C.	Raleigh, N.C.
Grieffiths, D.	Bur. of Plt. Ind.	U. S. D. A.
Grullemans, J.J.	Wayside Gardens Co., Nurserymen & Plant Growers	Mentor, O.
Gude, Wm. F.	Fed. Rep. of S.A.F.&O.H.	Wash., D.C.
Guernsey, Miss L.A.	Growing Narcissus with an object to propagate new varieties and to hybridize	106 Arlington Ave., N., Clar- endon, Va.
Guille, F.J.	American Bulb Growers Committee	350 Greenwich St., N.Y.
Hanagan, Miss F.L.	Landscape Gardener	Middleburg, Va.
Hancock, H.B.	Pres., State Farm Bur., Farmer	Bridgeton, N.J.
Harbosch, H.	Shipping	111 Broad St. N.Y.





Hardison, A.C.	Fruit Grower	Santa Paula, Calif.
Harrell, Mrs. A.E.	Fed. Hort. Bd.	U. S. D. A.
Harris, Mrs. F.W.	Box & Narcissus Grower	Aldie, Va.
Harrison, C.		Washington, D.C.
Hayden, C.	Member Congress, At Large, Arizona	Phoenix, Ariz.
Haynes, Mrs. A.C.	Citrus Grower & Packer & Bulb Grower	DeLand, Fla.
Haynes, A.C.	"	"
Head, Thos. W.	Prof. Gardener, Est. P.S. & H.N. Straus)	Middletown Farm, Red Bank, N.J.
Headlee, T.J.	Entomologist	New Brunswick, N.J.
Henderson, A.	Bulbs	24 W. Lake St., Chicago, Ill.
Hendrickson, I.S.	Mgr. John Lewis Childs Inc., Bulb Growers	Flowerfield, L.I., N.Y.
Henry, A.H.	Rep. Henry & Lee, im- porters & dealers in bulbs & seeds	97 Water St., N.Y.
Herrell, S.B.	Fed. Hort. Bd.	U. S. D. A.
Hildebrand, D.E.	Bulb Grower	Portsmouth, Va.
Hill, J.H.	Pres., S.A.F. & O.H.	Richmond, Ind.
Hilles, Mrs. Wm.S.	Amateur Grower	Wilmington, Del.
Hird, Wm.O.	I.M. Simon & Son, Bulbs & Seedsman	438 Market St., Phila., Pa.
Hooker, Wm.A.	Off. Experiment Stations	U. S. D. A.
Horwood, T.H.	Farmer-Banker	Goldsboro, N.C.
Houston, Mrs. K.B.	Amateur Gardeners of Balto., G.C. of A.	Rodger's Forge P.O., Balto. Co. Md.
Howard, L.O.	Chief, Bur. of Ent.	U. S. D. A.
Howard, Mrs. Wm.A.	Garden Club of America	Brickwalk, Pikes- ville, Md.
Howard, Mrs. Wm.R.	Green Spring Garden Club, Garden Club of America	Green Spring, Md.
Howe, Mrs. P.E.		P.O. Princeton, Plainsboro, N.J.
Howe, R.B.	Seedsman	235 W. Madison, Chicago, Ill.
Howe, Mrs. W.B.	Garden Club of Princeton	Princeton, N.J.
Howe, W.B.	Real Estate & Insurance	"
Hummert, A.H.	St. Louis Seed Co.	411 Washington Ave., St. Louis, Mo.
Humphrey, H.B.	Bur. of Plt. Ind.	U. S. D. A.



Hunn, C.J.	Bur. of Plt. Ind.	U. S. D. A.
Hunt, C.J.	Chester Jay Hunt, Inc., Importer	Little Falls, N.J.
Hunt, N.R.	Fed. Hort. Bd.	U. S. D. A.
Hunter, Mrs. A.J.	Catonsville Garden Club	Catonsville, Md.
Hyslop, J.A.	Bur. of Ent.	U. S. D. A.
Ingersoll, Anna V.	Amateur Gardener	1815 Walnut St., Phila., Pa.
Irvin, T.J.	Bulb Grower, Mgr. Buck- field Plantation	Yemassee, S.C.
Jones, S.A.	Florist	Baltimore, Md.
Josephs, Mrs. L.C.	Vice-Pres. Amateur Gard- eners Club, Balto; New- port Garden Asso.	Oak Pl. & Charles St., Balto. Md.
Jurgens, C.	Bulb Grower	Box 434, Newport, R.I.; Box 1424, Daytona, Fla.
Kahn, S.	Florist	Bulls Head, S.I., N.Y.
Karins, J.J.	American Bulb Co., Bulb Growers & Dealers	6 Murray St., N.Y.
Keith, Mrs. I.	Warrenton Garden Club	Warrenton, Va.
Kellerman, K.F.	Bur. of Plt. Ind.	U. S. D. A.
Kenerson, A.S.	W. Atlee Burpee Co., Seeds and Bulbs	485 N. Fifth St., Phila., Pa.
Kile, O.M.	Agricultural Economist and Writer	302 Albee Bldg., Wash., D.C.
Kilner, F.R.	Man. Ed., Florists Review	508 So. Dearborn St., Chicago, Ill.
Kimball, T.J.		1610 Walbrook Ave., Balto., Md.
Kisluk, M. Jr.	Fed. Hort. Bd.	U. S. D. A.
Kruegee, H.	Gardener & Reconstruc- tion Aide	Walter Reed Hos- pital, Wash., D.C.
LaBoiteaux, Mrs. I.	Member "Gardeners" G. C. of A.	Bryn Mawr, Pa.
Lachelier, B.	Rep. of H.E. the French Embassador; Com. Attache to the French Embassy	46 E. 25th St., N. Y.
Lane, B.H.	Ed.; Amateur Gardener	5327 Conduit Rd., Wash., D.C.
Langeler, H.	Bulb Grower	26 Cortlandt St., N. Y.
Larrimer, W.H.	Bur. of Ent.	U. S. D. A.
Lawrence, Mrs. G.C.	Farmer, Warrenton Garden Club	Warrenton, Va.





Lee, Mrs. C. O'D.Jr.	Garden Club of America	Brooklandville, Balto. Co.Md.
Legendre, J.L.	Princeton Nurseries	Princeton,N.J.
Lemmon, Mrs. F.E.	Special Writer for "House Beautiful Maga- zine."	150 Claremont Ave., N.Y.
Lemmon, R.S.	Man. Ed., House & Garden	19 West 44th St., N.Y.
Levering, Mrs. E.D.	Hardy Club of Ruxton	Ruxton,Md.
Lidebotham, Mrs. A.F.	Catonsville Garden Club	202 Hilton Ave., Catonsville,Md.
Lippincott, Mrs. S.W.	Amateur Gardener, Hardy Garden Club of Ruxton	Ruxton, Md.
Lippman, Wm.	Custom House Broker, Vice Pres., T.D. Down- ing Co.	88 Broad St., Boston, Mass.
Littlefield, Charles C.	Peter Henderson & Co.	35 Cortlandt St., N.Y.
Lloyd, Mrs. H. G.	Amateur Gardener & heavy importer of bulbs	Haverford, Pa.
Locke, C. A.	Fed. Hort. Bd.	U. S. D. A.
Lockwood, W. A.	Lawyer	20 Exchange Pl. N.Y.
Loomis, A. M.	Asst. to Wash. Rep., The Nat'l Grange	630 La. Ave., Wash., D.C.
Love, J. H.	Chrmn, Com. on Plt. Crs. and their administra- tion	69 Fifth Ave., N. Y.
Ludke, A.	Bulb Grower	Castle Hayne, N. C.
Lumsden, D.	Fed. Hort. Bd.	U. S. D. A.
Lumsden, D. V.	Horticulturist	Wash., D. C.
McCormick-Goodhart, L.	On Behalf of His Bri- tanic Majesty's Govt.	British Embassy, Wash., D.C.
McFarland, J.H.	Chrmn, Com. on Hort. Q.	Harrisburg, Pa.
McHutchison, J.	McHutchison & Co., Bulb Dealer	95 Chambers St., N. Y.
McKee, R.	Bur. of Plt. Ind.	U. S. D. A.
McMillan, Mrs. J.Wm.	Catonsville Garden Club	Arundel Apt., Balto., Md.
Macdonald, M.L.	Lawyer	304 McLachlen Bldg., Wash.D.C.
Mackintosh, D.L.	Prof. Gardener, Est. Manuel Rionda	Riovista, Alpine, N.J.
Magee, W.W.	Member, Congress, 35th Dist. N. Y., Lawyer	458 H. O. Bldg., Wash., D.C.





Mages, Mrs. Frank B.	Garden Club of America,	1239 Vermont Ave
	Farm & Garden Asso.	Washington, D.C.
Mahoney, W.H.	Merchants Asso. of N.Y.	233 Broadway, N.Y.
Manda, J.	Joseph Manda Co.,	191 Valley Rd.,
	Orchid Expert, Seeds-	West Orange, N.J.
	man & Florist	
Manda, W.A.	Horticulturist	South Orange, N.J.
Marlatt, Mrs. C.L.		1521 16th St.,
		Wash. D.C.
Marquand, Mrs. H.	Bedford Garden Club	Bedford Hills,
	of the G. C. of A.	N. Y.
Martin, Mrs. J.W.	Amateur Grower	Chestnut Hill,
		Phila., Pa.
Mason, P.W.	Bur. of Ent.	U. S. D. A.
Massie, Mrs. Wm.R.	(Farmer (Amateur)	Greenwood, Va.
Mechling, Mrs. M.H.		17 Taylor Ave.,
		Clarendon, Va.
Mellon, Mrs. T.A.	Garden Club of America	401 North Neg-
		ley Ave., Pitts-
		burgh, Pa.
Meyer, C. F., Corp.	Importers	99 Warren St. N.Y.
Meyer, J.F.	Meyer Seed Co.	Baltimore, Md.
Miller, A.	Pres., American Bulb Co.	182 N. Wabash
		Ave., Chicago, Ill.
Miller, A.L.	Florist-Wholesale	Jamaica, N.Y.
Miller, F. E.	In Chg. Test Farms, N.C.	Raleigh, N.C.
	Dept. of Agriculture	
Miller, Miss M.S.	Catonsville Garden Club	Catonsville, Md.
Miller, P.W.	Seed & Bulb Merchants,	Boston, Mass.
	Sec., Thos. J. Grey Co.	
Mitchell, Mrs. W.S.	Pres., Garden Club of	5128 Morewood
	Allegheny County	Pl., Pitts. Pa.
Montgomery, E.G.	U.S. Dept. Commerce	Wash., D.C.
Montgomery J.H.	State Plant Board	Gainesville, Fla.
Montgomery, R. E.	Seed & Bulb Merchants,	16 South Market
	Pres., T. J. Grey Co.	St. Boston, Mass.
Montgomery, Mrs. W.B. Jr.	Delegate to Conference	Hare's Lane,
	from The Feeders, Member	Radnor, Pa.
	of G. C. of A.	
Moon, H.T.	Nurseryman	Morrisville, Pa.
Morrison, B.Y.	Bur. of Plt. Ind.	U. S. D. A.
Morrison, H.	Bur. of Ent.	"



Mulford, F.L.	Bur. of Plt. Ind.	U. S. D. A.
Mason, T.W.		Boston, Mass.
Nelson, Mrs. R.W.	Amateur Gardener, Hardy Garden Club of Ruxton	Ruxton, Md.
Niemann, Chas.	Importer, Japan Lily Bulbs	261 Broadway, N.Y.
Oley, W.W.	Gen. Mgr., Del-Bay Farms	Bridgeton, N.J.
Olrecht, G.F. Jr.	Seeds & Bulbs, The Meyer Seed Co.	Baltimore, Md.
Overdevest, C.J.	Bulb Grower, Del-Bay Farms	Bridgeton, N.J.
Owrey, W.T.	Fed. Hort. Bd.	U. S. D. A.
Paris, Mrs. J.W.	Pres., Federated Garden Clubs of New York State	South Parsons Ave., Flushing, L.I.
Perkins, C.H.	Jackson & Perkins Co.	Newark, N.Y.
Persons, Mrs. Wm.E.		407 Battery Lane, Battery Park, Md.
Peterson, Mrs. E.	Sec., Horticultural Society of New York	598 Madison Ave., N. Y.
Pierson, F. R.	Chairman, Bd. of Dir. Hort. Soc. of N. Y., Nat'l Counsellor representing the S.A.F. in the U. S. Chamber of Commerce	Tarrytown, N.Y.
Pino, W.S.	Seedsman	Providence, R.I.
Poor, Miss K.	Sec., Garden Club of Ruxton	Ruxton, Md.
Pratt, Mrs. H.I.	Sec., Garden Club of America	598 Madison Ave., N.Y.
Primrose, Mrs. F.	Catonsville Garden Club	Catonsville, Md.
Prince, C.E.	Fed. Hort. Bd.	U. S. D. A.
Pyle, R.	Rosegrower & Nursery- man, Legisl. Com. Eastern N. Asso.	West Grove, Pa.
Randall, G.M., M.D.	Dir., Agri. Bur. Chamber of Com., Daytona Beach, Fla.	P.O. Box 156, Sea- breeze Sta., Day- tona Beach, Fla.
Rhodes, L.M.	State Marketing Com. of Fla.	Jacksonville, Fla.
Rich, C.	Universal Press Service	Washington, D.C.
Richardson, Miss A.S.	Farmer, Ridgefield Garden Club	Ridgefield, Conn.





Richter, P.F.	Rep. Henry F. Michell Co.,	518 Market St.
	Seed & Bulb Dealers	Phila., Pa.
Riggs, F.C.	Bulb Grower	909 Wilcox Bld
		Portland, Ore.
Rivinees, Mrs. E.F.	Amateur Gardener	Chestnut Hill,
Rockwell, F.F.	Author; Bulb Grower	Cape May, N.J.
Roeding, G.C. Jr.	Henry A. Dreer	Riverton, N.J.
Roeding, G.C.	Nurseryman and Fruit	485 California
	Grower	St., San F., Cal.
Rombach, Mrs. D.G.	Member at Large, Garden	212 Scranton Li
	Club of America	Bldg., Scranton
		Pa.
Rose, E.	Seeds & Bulbs	228 Willow Ave.,
		W. Somerville,
		Mass.
Rowell, C.H.		149 Tamalpais Rd
		Berkeley, Calif.
Ruffin, Mrs. K.L.	Garden Club of America	1101 Grayton Ave
		Norfolk, Va.
Russell, Paul	Bur. of Plt. Ind.	U. S. D. A.
Rynveld, B.	F. Rynveld & Sons	350 Greenwich
		St., N.Y.
Sanders, J.G.	Entomologist for Sun	Philadelphia,
	Oil Co.	Pa.
Sanders, P.D.	Entomologist, Univ. Md.	College Pk., Md.
Sanderson, Mrs. L.B.	Amateur, Rumson Garden	52 E. 67th St.,
	Club of N. J.	N. Y.
Sanford, H.L.	Fed. Hort. Bd.	U. S. D. A.
Sanger, Mrs. T.D.	"Hardy" Garden Club	Ruxton, Md.
Sayler, Mrs. J.A.	Catonsville Garden Club	North Bend Lane,
		Catonsville, Md.
Scheepers, J. T.	Dir. also Pres., John	522 Fifth Ave.,
	Scheepers, Inc.	N. Y.
Schoyer, Miss E.	Farmer, Ridgefield Garden	Ridgefield, Conn.
	Club	
Schwake, Chas.	Pres., Chas. Schwake & Co.,	149 Church St.
	Inc., Importers & Exporters	N. Y.
	of Horticultural Products	
Scott, C.W.	Importer & Grower	Montrose, N.Y.
Scott, L.M.	Fed. Hort. Bd.	U. S. D. A.
Seabrook, Chas. F.	Bulb Grower, Charleston,	Bridgeton, N.J.
	S. C., Kaster Co.	
Seeger, G.N.	Member Congress, 7th	Passaic, N.J.
	Dist. of New Jersey	



Sellers, Mrs.H.	The Gardeners, G. C. of A.	Millbounce, Phila., Pa.
Serpell, Miss G.	Garden Club of Norfolk G. C. of A.	902 Western Ave., Norfolk, Va.
Seymour, E.L.D.	Asso. Ed., Florists Ex- and Hort. Trade World	448 West 37th St., N.Y.
Shaw, H.B.	Fed. Hort. Bd.	U. S. D. A.
Shear, C.L.	Bur. Plt. Ind.	"
Shearman, T.G.	Office of Solicitor	"
Shoemaker, D.M.	Bur. Plt. Ind.	"
Shriver, Mrs.J.A.	Garden Club of America	Joppa, Harford Co. Md.
Shull, J.M.	Botanist; Iris Breeder	207 Raymond St., Chevy Chase, Md.
Siegwart, C.	Grower	23 Siegwart Lane, Baltimore, Md.
Skidell, S.H.	Rep. S.S. Skidelsky & Co., Bulb merchants	53 Park Place, N.Y.
Sloan, Mrs.S.	Pres., Garden Club of America	598 Madison Ave., N.Y.
Slocum, Mrs.H.J.	Member of Garden Club	2131 R St., Wash., D.C.
Smith, A.Z.	Supt., F.W. Woolworth 5 & 10 Cent Stores	Woolworth Bldg., N.Y.
Smith, Loran B.	Bur. of Ent.	U. S. D. A.
Smith, Mrs.Wm.O.Jr.	Hardy Garden Club	Ruxton, Md.
Smith, Mrs.T.	Princeton Garden Club	Princeton, N.J.
Sorber, D.G.	Amateur Grower	14 Franklin Ave., Hyattsville, Md.
Speelman, C.J.	S. J. Speelman & Sons Bulb Growers	470 Greenwich St., N.Y.
Sperling, W.A.	Seed and Bulb Merchants Sec. Stumpp & Walter Co.	30 Barclay St., N.Y.
Stanfield, R. N.	Represented by his Sec- retary E.J. Adams. (U. S. Senator)	S. O. Bldg., Wash., D.C.
Stevenson, J.A.	Bur. Plt. Ind.	U. S. D. A.
Stockwell, C.W.	Japanese Beetle Qr.	Riverton, N.J.
Strong, L.A.	Asst. Dir. of Agr. of California	Sacramento, Calif.
Swanson, Mrs.C.A.		2136 R St. Wash., D.C.
Swing, P.D.	Member Congress, 11th Dist. of California	El Centro, Calif.
Tansey, J.	Prof. Gardener, Est. Mrs. H. M. Tilford	Woodland, Tuxedo Park, N. Y.
Taylor, W.A.	Chief, Bur. Plt. Ind.	U. S. D. A.
Tegelaar, G.	Tegelaar Bros., Inc.	1133 Broadway, N.Y.





Temple, C.E.	State Plt. Path., Univ. Md.	College Park, Md.
Thomas, C.C.	Bur. of Plt. Ind.	U. S. D. A.
Thompson, Miss M.A.	"	"
Thurston, A.S.	Prof. of Floriculture, Univ. of Md.	College Park, Md.
Tilmont, Raoul	Belgian Charge d'Aff., Belgian Embassy	1780 Mass. Ave., Wash., D.C.
Torchiana, H.A. van C.	Attorney for Nether- lands Bulb Exporters Asso. at Haarlem, Hol.	Mills Bldg., San Francisco, Calif.
Totty, C.H.	Florist, Rep. S.A.F.&O. H. as Chrm. of the Tariff Legis. Com.	Madison, N.J.
Turnbull, Mrs. B.	Investigator	Rodger's Forge, Balto. Co., Md.
Turnbull, Miss E.L.	Member, Amateur Gard- eners Club	1536 Park Ave., Baltimore, Md.
Van Asch van Hyck, Jonkheer Dr. H.	Counselor Royal Neth- erlands Legation	1470 Euclid St., Wash., D.C.
Van Bourgondien, C.J.	Daffodil Grower	Babylon, N.Y.
Van Clinhoreen, H.C.	Bulb Grower, Rep. A. Trylink & Sons	Babylon, N.Y.
Van der Elst, Bon Y.	Sec. of Belgian Embassy	1780 Mass. Ave., Wash., D.C.
Van Rooyan, A.	Tegelaar Bros., Inc.	1133 Broadway, N.Y.
Van Slogteren, Prof. Dr. E.	Scientific Adviser of the Netherlands Gov.	Netherlands Lega., Wash., D.C., Lisse Holland.
Vaeenley, Mrs. <del>W.</del> B.	Member of Garden Club	Ruxton, Md.
Vandervliet, P.	J.A. Vandervoort & Co., Bulb Importers	Ozone Park, L.I., N.Y.
Vogelsang, A.T.	Attorney at Law	Mills Bldg., Wash., D.C.
Walton, Vm. R.	Bur. of Ent.	U. S. D. A.
Ward, Harry	Int. News Service	Wash., D.C.
Ware, Mrs. R.A.	Rep. New England Br. Womans National Farm & Garden Asso.	39 Newbury St., Boston, Mass.
Varnaar, B.	Bulb Grower	Sassenheim, Hol.
Waterer, A.	Seedsman & Bulb Imp.	714 Chestnut St., Phila., Pa.
Webb, Mrs. F.D.	Hardy Garden Club of Ruxton	Ruxton, Md.
Weigel, C.A.	Bur. of Ent.	U. S. D. A.





Weiss, W.C.	American Bulb Grower	Box 52, RFD 2, Portsmouth, Va. U. S. D. A.
Wheeler, G.C.		
White, A.M.	Del-Bay Farms, Farming	Bridgeton, N.J.
White, K.B.	Seedsman, D.M. Terry & Co.	Box 648, Detroit, Mich.
White, W.H.	Bur. of Ent.	U. S. D. A.
Whitner, B.F. Jr.	County Agr. Agent	Box 1018, Sanford, Fla.
Wiebens, J.A.	Seedsman & Grower	Greenville, S.C.
Wiley, Mrs. S.W.		Ruxton, Md.
Wilk, J.	Seedsman	151 W. 33rd St. N.Y.
Williams, G.H.	(Rep. by his Sec. E.N. Meadow) U.S. Senator from Missouri	331 S. O. Bldg., Wash., D.C.
Wood, W.B.	Fed. Hort. Bd.	U. S. D. A.
Woodbury, R.W.	"	"
Worthington, Mrs. E.H.	Pres., Amateur Gardeners Club, Balti- more; G. C. of A.	1531 Bolton St., Baltimore, Md.
Yerkes, Guy E.	Bur. of Plt. Ind.	U. S. D. A.
Young, J.	Sec., S. A. F. & H.	247 Park Ave., N.Y.
Zandbergen Bros.	Bulb Growers	Oyster Bay, N.Y.





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Assistant Secretary Dunlap. The meeting will please be in order. Secretary Jardine asked me to say to you ladies and gentlemen that he is indeed sorry that other commitments which he made months ago prevent him from being present at this meeting. It was suggested that possibly we might postpone the meeting until such time as the Secretary may be present, but we felt that those of you who were directly interested in the bulb industry were anxious to have this matter of quarantine settled definitely and at an early date. Therefore, the Secretary asked me if I would not represent him at this meeting and preside and make a report to him.

Please bear in mind that this meeting was not called by any bureau of the Department, any board or any other unit but it was called by the Department itself. In view of the fact that the Federal Horticultural Board is charged with the administration of the Plant Quarantine Act I think it is wise and well that they sit with us in this hearing and give us whatever information they may have pertaining to this subject. I presume that most of you know that in the personnel of this Board are representatives from the Bureau of Plant Industry, Bureau of Entomology and the Bureau of Forestry. This Board calls on all of these bureaus which I have mentioned and other bureaus of the Department for any informa-





tion they may have on any subject in which they are interested. I have purposely refrained from informing myself on this subject which will be discussed at this conference.

My experience as a presiding officer is rather limited but I have refereed a good many football games and I have found that the team which plays hard and fast and a strong game, the team that does very little swearing and engages in few personalities and observes the rules generally gets fewer penalties and crosses the goal line oftener. I am sure, too, that time is valuable to all of us and that we do not care to discuss any matter which does not bear directly on this subject. However, I want you to understand that every hour and every minute will be given so that all the facts can be presented by all those interested.

I am going to ask the chairman of the <sup>#</sup>Federal Horticultural Board to tell us and those of you who are not informed --- I imagine there are some here who are not directly interested in this question --- what this conference is all about, the things which led to the calling of this conference to discuss this subject of plant quarantine.

Dr. Marlatt: Mr. Secretary, ladies and gentlemen, I wish first to make a few announcements. Following the idea



of the secretary in his original announcement that he wished to have this subject reviewed and the facts, as they are to-day, regarding bulb infestation, as they come from abroad, as fully developed as possible as a basis for reaching an accurate decision, we have had those facts tabulated and they have been printed, manifolded, and I think have been distributed so you can study them at your leisure. We will have a brief discussion later on by some of the experts of the Department.

These tabulated statements refer to the results of the examination of narcissus bulbs at ports of entry. They show, so far as examinations were made, the actual status of insect and pest carriage on these bulbs in this year. The facts as to the establishment throughout the United States of these pests is based on a thoroughly wide survey of the United States made during this year. This survey has been much better with respect to the bulb fly than it has been with the eel worm, but we will have a report, both with respect to the insect side and the eel worm side.

We will distribute cards sometime during the meeting, after we think nearly all of the people are here, which we would like to have filled out. We want a record of the per-





sons who attend this conference, the name and address and business connection, an indication as to the particular reason why they are interested in this subject. I hope you will all fill out these cards as soon as they are distributed.

The Department has arranged to have a very skilled and experienced reporter take down the record of the conference. The gentleman who is doing that work has long been in the service of the Department up to a few years back when he left. He is a most expert stenographer. We also have here our own secretaries to make their reports. In the case of these reports, as you know, we make a full stenographic record and these are sold to any one in interest. This is a commercial feature which I am now discussing, the only commercial feature, I hope, to discuss today. Copies of such records are sold. We cannot give them away. The price is fixed when they are made by the government at so much a folio. Those that are now being made by Mr. Syfrig will be available at a price substantially the same as the government price. There will also come up the question as to whether the results of this conference will be fully printed. That idea has been suggested by some already. That may be done later. It may be taken up later.

We have draw n up a little program here of the order of



business. That program has not been distributed because it was made up at the last minute. It begins with the opening statement of the Secretary, a statement which I will now make, and then we will present, briefly, the result of this investigation which was made this summer, so that the whole matter will be placed before you. This will be merely a presentation of the facts without argument. Facts speak for themselves. Following that there will be an open discussion of the subject that is before us. It is proposed that the complainants have the first innings, and by request and by natural wish on our part we will give the Garden Club ladies the first chance to speak and after those who are opposed to the restrictions which were approved by the late Secretary Wallace have had their time and completed their statement, if there is anything to be said on the other side, an opportunity will be given. After that there will be general discussion.

I wish now to make a little statement prior to the opening of the general discussion. I wish first to speak of the steps leading up to this conference. There seems to be an opinion which has been stated fairly often that there has not been a conference or hearing on the bulb subject. In point of fact, this is one of the four public conferences at which this subject has been discussed, counting the original hear-





ing in 1918 which was the basis of quarantine 37. Following that hearing in 1918 a certain list of bulbs was submitted to the Department of Agriculture as being practically harmless and as being unavailable in this country and hence constituting a horticultural necessity. That list of six bulbs was included under the regulation and those bulbs were permitted unlimited entry, as you know. It developed shortly after the promulgation of the quarantine, almost before it went into effect, in fact, that there was some doubt as to the legitimacy -- that is hardly the word I want to use -- as to whether the bulb list of six was really an adequate list, in other words, whether it was not too small. The question was whether the list could not be enlarged without harm and with benefit to the country. The Board was so impressed, and as a result, at a meeting of the florists and ornamental horticulturists at Detroit in 1919, in August, I made the announcement that the Department would be very glad to have persons in interest get together and present their wishes to the Department and that their wishes would be given very respectful consideration, that the Department would make such enlargements as would seem necessary. No action was immediately taken on that but later there were repeated demands from some of our own people and also foreign exporters, who were naturally interested in

the



subject, for a chance to discuss that phase of the quarantine, and it was announced that such a conference for that purpose would be called. Such a conference was fixed for the early part of 1922 and it was announced particularly as a bulb conference. Before that conference was held there were a great many requests that the subject be broadened so as to cover the whole phase of Quarantine 37, and eventually the subject was broadened in the announcement to cover Quarantine 37 as a whole. That conference was presided over by Secretary Wallace so far as his time permitted and resulted in a general discussion of all phases of Quarantine 37. In fact it occupied so much time that we did not get down to the bulb subject. Inasmuch as there was a keen interest in the bulb subject and in a few others, at the request of persons in attendance we provided for a supplemental bulb conference, and other conferences on certain other subjects, to be taken up later, after sufficient time had elapsed to give opportunity for the collection of all data on both sides, and such special bulb conference was held on October 30 of the same year. This was a nation-wide conference; in fact, it was an international conference, inasmuch as we had representatives here from many foreign countries, practically all foreign countries interested in bulb export to the United States. In calling that conference the Department and the Board announced





in its notice that it would very likely result in a very considerable enlargement of the number of kinds of bulbs to be permitted entry. That was our expectation. The facts of bulb pests entering with these bulbs, which had developed in the meantime, or knowledge of them, was presented with such force and insistence by the bureaus of the department concerned, the Bureau of Plant Industry and the Bureau of Entomology, that the additions to the bulb entry were limited to some eight bulbs; in fact, the recommendations were that there should be no additions at all, but that if there should be any, only a certain four, and the Secretary wanted to go still further and make it eight. The Secretary went still further and placed eight additional bulbs on the list, but that was for a three-year period, at the insistence of the departmental experts. At the same time it was clearly shown that the narcissus bulbs were bringing in more pests than any other. It was the bulb which seemed to be the special and excessive carrier of pests. It was felt that the further entry of that bulb should be terminated at the earliest practicable moment and therefore it was fixed to take effect after a three-year period. Any one can criticize that postponement and I will agree with them. but it was a case of reasonable adjustment, so that foreign growers could readjust themselves and so that our own importers, who make contracts



sometimes two or three years running in advance, could escape unnecessary and heavy losses. It was also felt, incidentally, that our own people, if they so chose, could produce the bulbs so that we would not be deprived of this flower. That is subject to criticism. Any postponement of any kind of action like that is subject to criticism. However, it has been the rule of the government to give a certain leeway in all of its regulatory actions. There was a considerable leeway given, for instance, when the Volstead Act was passed, which gave some people a chance to stock up their cellars for years to come! (Laughter.)

Now, as to the basis. I want now to discuss for a moment the problem that is before us, in other words, the basis for any reconsideration of the action taken three years ago. The bulbs as they are coming to us from Europe at the present time -- narcissus bulbs I have in mind, particularly, of course -- are as much or more infested now than they were three years ago. The facts, as we have been able to get them, show that there is an increasing infestation by bulb flies and eel worms, particularly by bulb flies and eel worms. That situation has not changed except for the worse. The importance of these pests as agricultural enemies of the farm crops of the country, including clover, alfalfa and onions has become more apparent





and better known. Hence, the menace has not diminished. It is fully as great now as it was then. The only facts that would warrant a change in the order which was passed three years ago would be some condition in this country which would make unnecessary or useless the restriction on the further entry of these bulbs. The only thing which would warrant a change would be the wide establishment of these pests in this country -- such an establishment that the pests must shortly overrun the country, and such a thorough establishment as to give no reasonable hope of eradication or control. In other words, if the horse is stolen there is no object in continuing this restriction. If the infestation is so widespread that the continued and repeated bringing in of these bulbs for years to come will add nothing to our risk, then there would be no reason for further restriction. That seems to be the important, the crucial matter, which we want to discuss today, which we want to get fully in hand today, so that the Secretary can make a fair and just decision as to whether this action should be continued, modified or reversed.

I do not know whether it is proper for me to say just a word further; that so far as the people are concerned who have invested very heavily in bulbs in the belief that the action of the Department taken three years ago was justified and would stand, such persons have expressed to me very generally



the broad-minded public-spirited feeling that, while they have gone into these investments in good faith and under the belief that the action was warranted, if it should be shown that that action under the present conditions should not be maintained they would not put their personal interests in the way. Those speaking to me may have gone a little further than some other people might go in thus stating their views with respect to this matter. On the other hand, they wanted it distinctly understood by the Department that if conditions have not so changed as to make the action of three years ago untenable, they wanted that action to stand; and I think that is fair on their part. If it is a doubtful or wobbling situation based on insufficient knowledge, I think that is a fair point of view.

Mr. Vogelsang. I am Alexander T. Vogelsang, representing the Bulb Dealers' Association of New York. I merely wish to ask, and I think that the Chairman has already indicated that this conference is confined to the bulb question, that the constitutionality of the Act and the legality of Quarantine 37 is not involved, that we are merely discussing here the question of bulbs and no other plants and no other question. I take that to be the fact from the call that was made.

Assistant Secretary Dunlap. That is my understanding.

Mr. Vogelsang. If that is the understanding we are per-





fectly satisfied.

Assistant Secretary Dunlap. The next order of business is to give those who are opposed to the action taken in 1922 in regard to these bulbs a chance to be heard, and it is customary, I believe, in all cases, to allow the ladies to have the right of way, and in this case we do not want to be the exception. The Chair will therefore recognize any ladies who wish to speak for the Garden Club at this time.

Dr. Marlatt: Perhaps I was in error, Mr. Secretary. The data which the Department has collected should be first given, so that Mrs. Pratt, or whoever may wish to speak, may have the data before them relative to bulb infestations. They should also have before them the data on the establishment of the bulb pests in the United States. That should be the next order.

Mr. Sasscer: Mr. Secretary, ladies and gentlemen, inasmuch as a statement has already been passed around indicating the results of the efforts of the inspectors of the Federal Horticultural Board during the past year, it does not seem necessary to go into this report in detail but merely to refer to the outstanding facts. Unfortunately our records are not up to date, due largely to the fact that all of the entries or reports of entries have not been received, and hence we can not indicate definitely the number of narcissi arriving for the entire season



We have definite records, however, as applied to importations up to October 10, and there were 153,278,889 narcissi imported from Holland and France, or approximately 122,898 cases. The number of cases examined was comparatively small as compared with the total, owing to the shortage of inspectors and the necessity of prompt handling of the materials. We were able to examine, however, a little less than 2 per cent of the total. Of those examined we found 7.13 per cent of the cases infested with the lesser bulb fly and 10.9 per cent of the cases examined infested with the narcissus or large bulb fly. In the case of the eel worm we found that .2 per cent of the samples selected were found to be infested. That applies to those from Holland. 5.8 per cent of the samples examined from France were found to be infested. As explained in the circular which has been passed around, it is very difficult, if not impossible, to locate the nematodes in bulbs without dissection, and as we discovered later in the season, it was practically impossible to detect the larger bulb fly with any degree of certainty without cutting the bulbs. In other words, by examining the bulbs by the so-called hand-method, that is, pouring them out on a tarpaulin, and examining each bulb and putting it back in the case, we found about one-fourth of one per cent of infestation with the narcissus fly. In the case of eight cases





which were inspected and which showed an infestation of one-fourth of one per cent we selected one hundred bulbs from each of these eight cases and dissected them and the percentage of infestation varied from zero in one case to 15 per cent, or for the total of eight cases it averaged 5.8 per cent infestation. With those few remarks and with some lantern slides I think we will have given you some idea of the situation as it was found at the ports of entry. (See full statement submitted to conference.)

(At this point a number of lantern slides were shown which were described by Mr. Sasscer as follows:)

Mr. Sasscer (Continuing): This picture gives you another view of another shipment, indicating the almost impossibility of getting in there and getting a real true picture of the bulb situation. We discovered that the cases arriving from France and Holland varied as to the number of bulbs that they contained. In the case of Holland they run about 1,000 bulbs per case, and in the case of France a little over a thousand bulbs per case.

This is another view which will give you some idea as to the number of bulbs arriving on one ship.

This slide indicates the method of examining bulbs by the so-called hand-method, pouring the bulbs on a tarpaulin or on the ground and giving them a superficial examination.



This picture shows a case which developed to be badly infested. The inspector there is sorting them out as best he can. On the next slide you will see the number of maggots and pupae and adults found in this case. There was a total of 714, all of which were the lesser bulb fly with one exception, and that was the larger or Narcissus bulb fly.

This is another lot of bulbs, some 47 in number. On cutting these bulbs we discovered that they contained 35 maggots of the larger bulb fly which are illustrated in this lantern slide.

This indicates and shows you a few of the bulbs infested with the larger or narcissus fly. It may be stated that our experience has indicated that we usually find from one to a maximum of three maggots per bulb. That applies, of course, to the larger bulb fly.

This illustrates the adult, the larvae and pupae of the larger bulb fly.

This is a bulb infested with the so-called lesser bulb fly. The bulb is infested with this insect usually much heavier than it is with the larger or narcissus fly.

The bulb on the left is a healthy bulb.

This illustrates the various stages of the lesser bulb fly. As indicated on the screen, the lesser bulb fly is much





smaller than the larger bulb fly. The difference in size is pretty well illustrated on these two slides.

Here are 70 maggots from one decayed narcissus, indicating the number of maggots that you may find, although you do not always necessarily find that number in a badly infested bulb.

This is a small narcissus bulb showing infestation with both species which is rather unusual. You will notice the large one in the center is the narcissus or large bulb fly and the three to the side are the lesser bulb fly larvae.

Now, the next lantern slides that we have relate to the bulb eel worm and inasmuch as Dr. Cobb is a specialist on this subject, I am going to request that he take the floor and explain those slides.

Mr. Rhea F. Elliott. The speaker has said that a certain percentage, in one instance, 14 per cent, was infested. It is not clear in my mind whether he means in this instance cases or bulbs.

Mr. Sasscer. Does that apply to the eight cases?

Mr. Elliott: In the early part of your remarks you said you found 14 per cent of the cases infested. That does not mean every bulb in the case, does it?

Mr. Sasscer. No. One bulb would make an infestation although we usually found more than one in that case.



Dr. Cobb: "The disease under consideration is caused by a nema. This organism, though very small, is highly organized. It is eel-shaped, or serpentine, is about one-twenty-fifth of an inch long and so slender as to be practically invisible to the naked eye. It has separate sexes and reproduces by eggs which give rise to larvae resembling the adult in form, but smaller; these mature in four to six weeks. As each female may produce several hundred eggs, multiplication is very rapid under favorable circumstances. Multiplication and growth take place during the warmer seasons of the year and are slowed up, or cease, in winter. The eggs and larvae are very resistant to dryness; for instance, clean clover seed from diseased fields, even after it is over a year old, often carries some form of this organism in a living condition; such cases are common. As the organism can remain alive for months or years in a dried up condition, its spread through commerce is thus favored.

The disease has been definitely known since the organism was first described:- 1858. Descriptions of what may have been the disease date back to 1752. As, however, it is unscientific and superficial to identify this disease except on the basis of the causative organism itself, these earlier records are subject to some doubt.

The causative organism was discovered and described by Kühr



in 1858 and given by him the specific name it now bears. He called it Anguillula dipsaci, but later named it Anguillula devastatrix, i. e. the devastating or destructive eel-worm, or nema. Its proper scientific name is Tylenchus dipsaci; however, it is most often referred to in the literature as Tylenchus devastatrix, especially abroad. In English it is sometimes referred to as the "stem nema", owing to its attack on the stems of clover, alfalfa, strawberries, etc., and is also referred to as the "bulb nema" or narcissus disease. The degree of seriousness of the disease may be judged from its literature, which is copious, more so, in fact, than that of most plant diseases. There are over 100 articles or treatises on the disease, written in 7 different North European languages, including among the authors about a dozen representative scientists. The disease occurs in Great Britain, France, Belgium, Holland, Germany, Denmark, Sweden, Switzerland, Austria, Algiers, South Africa, Australia and the United States. It attacks over 80 different plant species. It attacks about 20 important crops, namely. alfalfa; alsike; barley; beans; buckwheat; red, white and crimson clover; flax, hemp; horsebean; hyacinth; oats; onion; narcissus; potato; rye; strawberry; turnip and wheat, as well as a considerable number of other crops of minor importance. It has been reported as more or less serious on alfalfa; buckwheat; the various clovers;





horsebean; hyacinth; narcissus; oats; onion; rye and strawberry. On the other important crops which it attacks, i. e. nearly half of them, it has not as yet been reported as very serious."

The annual value of these crops in this country, according to the latest statistics, is about three billion dollars.

"Some plants of little economic importance also are attacked, and in some of these cases the attack is serious to the plant. When these other plants are common weeds, the disease attains, even in them, an economic significance because of the possibility that it may be transferred from these weeds to crops.

"This does not seem the place to describe the various symptoms of the disease, but pointed attention is called to the fact that it is unscientific, superficial and often misleading to judge of the presence of this disease on the basis of outward symptoms alone. Considering the ease with which the organisms may be found by modern scientific methods, the only satisfactory diagnosis of the disease is through the discovery of the organism.

"The disease is spread in two main ways: first, by the activity of the organism itself. The spread in this way is not rapid; and when compared with the other ways in which it can be spread, comparatively insignificant, except in connection with the disease as it occurs in a limited space. Second, through commerce. The organism withstands dryness and hence can be



transported alive in dried up particles of diseased plants, by almost anything that moves, unless that moving thing is so hot or so poisonous, or so constructed or compounded as to kill the organism. Otherwise almost any moving thing of appreciable size with which the organism can come in contact may spread it. This includes man and his tools, animals, birds, insects, water, wind, wagons, trains, boats and very many other things.

"Methods of combatting the disease have been devised but it seems unnecessary here to go into details. As a whole, these methods are such as to permit of successfully combatting the disease under a considerable variety of circumstances. Once the disease has been introduced into a piece of land, there is little hope that it can be exterminated. The most that can be said is that by the application of the methods so far devised the disease often can be reduced to a bearable condition. It probably has never been exterminated in any country or region in which it has appeared. Treatment consists in the application of sufficient heat to seed, bulbs, or to other infested material to injure or kill the nema without too great injury to the plant. Under some circumstances it is possible profitably to grow in rotation resistant or immune crops on the infested land long enough to so diminish the nemas that a susceptible crop can again for a time be grown at a profit. Chemical treatments have been tried, but





so far with no very pronounced success.

"The means of prevention consist in education and application of a knowledge of the disease to prevent its occurrence. As usual, prevention is better than cure.

"At various times during the last 40 years experiments have been made in transference of the organism from one host to another. Of about 150 attempts, two-thirds were successful in transferring the organism from one host to another host of a different species; one-third were negative. A table of these results is presented.

"The results as tabulated may be subject to doubt because the decision whether the plant was infested or not often was based on the outward appearance of the plants; i. e. if the plant had symptoms known to be characteristic of nemie infestation (distortion, discoloration etc.), it was regarded as infested; --- otherwise not. Such a method is superficial and often may lead to wrong conclusions, for, under certain conditions, a plant infested by Tylenchus dipsaci may show no deformity or other obvious lesion. Negative results, therefore, can be regarded as conclusive only when based upon careful microscopic investigation of the plant with regard to Tylenchus dipsaci.

"This doubt applies, not to all the negative results tabulated, but to many of them. The positive results also are more or less subject to a somewhat similar doubt, but there seems good



reason to believe that the doubt is decidedly less in the case of the positives.

"It is a well-known fact that a nemic pest sometimes needs considerable time to adapt itself to a new host plant; sometimes 2 or even 3 years may elapse before the pest is well established in a p\_\_lot or field. Therefore in all cross-inoculations the time factor should be taken into account ---a well known precaution not only for the present parasite but also for other cases of change of food and environment. In this connection reference is made to Craighead's paper -- 'Hopkins Host-selection Principle as Related to Certain Cerambycid Beetles.'

"In most of the cross-inoculation cases mentioned no thought appears to have been given to the preferences of the nema. When there is a choice of host, nemic parasites may wholly, or almost wholly, neglect what may be called 'the second choice', passing almost wholly into the preferred host, possibly leaving other hosts practically untouched, thus deceiving the unwary with regard to relative susceptibility. There is evidence that choice of host is determined by past history. Thus nomas long infesting only Narcissus seem to prefer Narcissus."

If I may digress for a moment, it is the same as if you were to place before a small boy a piece of apple pie and some chicken and also some corned beef and boiled carrots. He would



undoubtedly attack the apple pie and chicken and leave the corned beef and boiled carrots alone, although they are perfectly good food for him.

"The maps show the places where the disease has been found since its discovery in this country in 1907. All cases known to the Department are mapped. It is assumed that wherever the disease has once been found it still exists, since there is no known means of exterminating it. To make the map effective on the screen it has been necessary to make relatively large spots to represent the localities; if the infested areas were shown on a correct scale on a map of this size they would be represented by mere points. More and more cases have been recorded each year since the early discoveries. At the locations indicated on the map the disease has been identified by identifying the organism. The history of the cases is usually something like this: A grower or other person interested in the crop notices a disease, and either with or without suspicion of what the disease is, forwards it for examination and determination. The disease, having been determined by a microscopic examination of the organism, is mapped. Sometimes an unusual number of such cases in one locality led to a survey, - as extensive as the funds at disposal permitted. Many of the examinations represent more than a single infested field. Quite frequently a dozen or more fields were found infected, and examina-





tions were made up to as many as 50 fields, in one locality shown on the map by a single spot. Under such circumstances it is usual to find fields in which no trace of the organism can be found in the same town or locality where diseased fields occur. This is one of the striking features of the distribution at the present time."

(At this time certain exhibits were shown on the screen and were amplified by Dr. Cobb as follows:)

Dr. Cobb: This is one of the striking features of the distribution of this disease at the present time.

Mr. McFarland: Will the lecturer be good enough to say how long this nematode has been eating apple pie and chicken in the United States?

Dr. Cobb: It was first discovered in the United States in 1907. It was found on rye in the State of Kansas.

If you will examine the map you will see certain round spots. That is the disease as it was known to the Department during 1907, 1913, and 1915. It was first discovered in Kansas and later in the State of Oregon. The colors show the crops involved. Red stands for strawberries, yellow for narcissus, green for alfalfa, purple for clover, and white represents all other crops combined. You will notice that in the year 1920-21 there is an increase in number, particularly in the states of Idaho and Washington. In 1923



there was an increase in number. You will notice the various yellow spots in the east and the blue and green spots in Colorado. In 1924 there is a greater number in Colorado and also in New Mexico, California, and in other areas in which it had not hitherto been found. The spots on this map have been made out of scale, purposely large, so that they would be readily visible. If they were shown in proper scale they would be invisible to you. These same maps are shown in series at the back, with proper explanations, and you can study them at your leisure.

Dr. Marlatt: Mr. Weigel will give a statement which will indicate the investigation made during the year of the occurrence of the bulb flies in the United States, of what seems to be the establishment of the bulb flies throughout the United States.

Mr. weigel:

"The Bureau of Entomology was requested by the Federal Horticultural Board to obtain reliable information and facts concerning the establishment and injuriousness in the United States of the insect pests that attack bulbs, especially the lesser bulb fly, Eumerus strigatus Fallen, and the larger narcissus or daffodil fly, Morodon equestris Fab., as well as the bulb mite, Rhizoglyphus hyacinthi Boisd.

"During the months of June and July, 1925, some of the more important bulb growing sections of the Pacific Coast were visited, and after returning from there several days were spent





investigating conditions in the bulb plantings around Norfolk, Va. Early in October, plantations of old and naturalized stock were examined in the vicinity of Wilmington, N. C. Some of the leading bulb growers, as well as various State officials, were interviewed on this survey and personal examinations were made of growing and dug bulbs to determine the status of the above named pests.

#### Methods of Inspection

"Inspections were made, either directly in the field at the time of digging, or on samples of bulbs that were dug in my presence, or else of bulbs in storage houses which had been dug only a few days before. In general, the size of the samples examined varied from a few to several hundred bulbs of a given variety, the actual number depending on the quantity available for such use. In three instances, however, the samples contained 970, 1,000 and 2,000 bulbs, respectively. An inspection consisted first of sorting out and laying aside all bulbs that on external appearance showed any defects or bruises or were soft to the touch. Then these damaged or suspected bulbs were cut open to determine whether their poor condition was caused by infestation with insects or mites. Many apparently healthy bulbs were also cut open in order to verify their freedom from pests. Records were kept of the total number of healthy and affected bulbs examined as well as



the number that were found to be infested, and in this way definite information was obtained showing the actual percentage of infestation. A summary of the findings is here given.

"Conditions on the Pacific Coast.

"Both species of bulb flies were found in many of the older plantings examined on the West Coast. The bulbs in most of these plantings had been growing there from two to five years. In one instance the flies were encountered in a field of bulbs the stock of which was nine years old.

"A total of 27 plantings examined in the States of California, Oregon, and Washington showed that the lesser bulb fly was present in 19, and the narcissus fly in 17. Presumably if time had been available or if other circumstances had been such as to permit a very exhaustive and thorough inspection of the bulbs in each planting, both species of flies might have been found in some of the plantings that are here reported as apparently uninfested.

"This statement must not be construed as meaning that the growers were unwilling to have such an examination made. On the contrary, all of them were very courteous and extended the fullest cooperation in placing their stocks at our disposal.

"The percentages of infestation shown by some of these examinations represent the actual condition and degree of infesta-



tion of unculled bulbs at the time of digging and storage, whereas imported bulbs when received for inspection at the port of entry are supposed already to have been culled and freed from damaged or pest infested material.

"The various bulb pests of the Pacific Coast treated herein are discussed under separate headings.

"The Narcissus or Daffodil Fly.

"This foreign insect is recognized as a serious pest of narcissus and a bulb once attacked by it is usually destroyed and of no further commercial value. While this pest was encountered in 17 out of a total of 27 plantings on the Pacific Coast, the degree of infestation for individual lots or samples of dry bulbs varied greatly, the maximum being 15% of the bulbs in the sample examined. An analysis of these figures by States brings out certain facts.

"In California, this fly was found in 7 out of 18 lots examined. The percentages of infestation in these cases were as follows: 1%, 3.3%, 4.6%, 5%, 7.8%, 8% and 15%.

"In Oregon it was found in 7 out of 8 places. Where definite records were made, a total of 22 lots of bulbs was examined, 7 of which were infested. The percentage of infestation was less than 1% in 5 lots and was 4% in the other 2 lots. In one instance, a few larvae were found infesting 2 varieties of narcissus out of





6 that were examined. In another instance, 2 flats of Golden Spur bulbs imported during the fall of 1924 and forced in the greenhouse during the past winter were free from infestation, while one flat of imported Victoria bulbs forced under the same conditions showed an infestation of 6.6%."

The latter case gives an idea of an infestation as it occurred in the bulbs received in the previous fall and forced and placed just outside the greenhouse after the forcing was over, showing the infestation in a given lot of bulbs.

"In Washington five plantations were infested. Of the 6 lots examined, 2 showed infestations of 11.4% and 12.5% respectively; one was estimated at 15% and the other three were not determined.

#### "The Lessor Bulb Fly.

"An examination of the table again reveals some interesting facts with reference to the degree of infestation of this insect in the three Pacific Coast States. In general, the degree of infestation was rather light as shown by the following data. A total of 55 lots of bulbs was examined, and the degree of infestation was as follows:

21 were uninfested.

9 were so slightly infested that the percentage was not determined.

13 had less than 1%.



7 had from 1% to 5%.

2 had from 7.1% to 8.9%.

1 was estimated at 15%.

2 had from 47.6% to 52.7%."

In the latter case it was an infestation which had been occurring in the particular plot for the last two years.

"The last two lots included Van Waveren Giant bulbs that had an infestation of 47.6% based on an examination of 21 bulbs, and Golden Spur bulbs with an infestation as high as 52.7%, based on an examination of 110 bulbs. In the same field, however, four varieties of narcissus, namely; Paper Whites, Emperor, King Alfred and Sir Watkin, were free from infestation.

"In California a total of 18 lots of bulbs was examined from 13 plantations and 9 of them were infested. In 4 lots where accurate records were kept, the infestation varied from 0.2% to 1%. In 4 lots where many bulbs were examined the infestation was so light that it was not definitely determined.

"In Oregon 28 lots of bulbs were examined from 8 plantings and of these 16 were infested. In 10 instances the infestation was less than 1%. One was not determined, and the remaining five were as follows: 1.9%, 4%, 7.1%, 47.6%, and 52.7%.

"In Washington 6 lots of bulbs from 5 plantations were examined and found to be infested. Two of them had infestations of





2.1% and 2.8% respectively; one was estimated at 15%, and three were not determined.

"The following instance already mentioned under 'Narcissus or Daffodil Fly', illustrates the degree of infestation that may be found in culled imported bulbs when they are received in this country. Two flats of Golden Spur bulbs imported into Oregon during the fall of 1924, and forced in the greenhouse during the past winter showed infestations of 4.3% and 8.9% respectively, while a flat of imported Victoria bulbs forced under the same conditions was uninfested.

#### "Economic Status of the Lesser Bulb Fly.

"With respect to the economic status of the lesser bulb fly, the maggots when nearly full grown are usually found in very badly decayed bulbs, although in one or two instances they were seen feeding in the healthy tissue next to the rotted areas. Necessarily rotting must follow such heavy infestation. In life history studies conducted during the fall of 1924, female flies, fed on honey and confined in cages, when given a choice of healthy and rotted bulbs, deposited eggs only on the under surface of the tightly clinging outer dry skins of the healthy bulbs. Eggs were never deposited on damaged or rotted bulbs as might have been expected even when confined with such bulbs.

"Larvae which hatched from those eggs late in August passed



through their normal development in onion and narcissus bulbs, which were perfectly healthy at the time that the eggs were laid on them. Some flies of this brood emerged during October and laid eggs on healthy bulbs for the succeeding generation which was also reared successfully. Young larvae were observed feeding in sound bulb tissue, and the larval mouth hooks are adapted for feeding in such tissue.

"This information which was obtained from carefully conducted laboratory experiments indicates that this insect can not be classed merely as a scavenger, for it has been shown to be capable of attacking healthy bulbs. Information, however, is still lacking on the question of how infestation takes place under field conditions.

"As an economic pest of onions the following evidence regarding the habits of the lesser bulb fly has been accumulated. On September 15, 1925, Prof. Don C. Mote, of the Oregon Agricultural Experiment Station submitted to the Bureau of Entomology several adult flies which had been bred from infested onions received from Oregon. Doctor Aldrich verified the identify of these specimens. Professor Mote also recently submitted a specimen of onion heavily infested with lesser bulb fly maggots. This is in agreement with the results of our experimental work during the past year in which this insect was successfully reared in onions under





laboratory conditions. It also indicates that the fly can and does attack onions and may prove to be a pest of that crop. Moreover, in view of its reputation as an onion pest in Europe, this insect deserves careful observation under field conditions to determine whether it is likely to assume a similar status in this country. Published records also indicate that this insect causes injury to parsnips in England.

"In addition to ornamental bulbs, onions, and parsnips this insect has recently been found infesting iris rhizomes and yellow callas. Flies have been reared from larvae infesting iris rhizomes sent in recently from Takoma Park, near Washington, D. C. E. P. Folt, State Entomologist, has also published a note on its occurrence in iris rhizomes in several localities of central and eastern New York State. Entomologists of the California Department of Agriculture have recently found it infesting the yellow calla, Zantedeschia elliottiana, and on previous occasions they have reported it as infesting Dutch, French and Spanish iris, Lilium auratum, and L. speciosum.

#### "The Bulb Mite.

"With reference to the status of the bulb mite as a narcissus pest the results of our examination indicate that, although present in virtually all plantings examined, the degree of infestation was so negligible that no attempt was made to determine the exact per-





centage. While its presence was generally associated with diseased or fly infested bulbs, it was also observed feeding in and injuring healthy bulbs. This agrees with previous observations by other workers in the Department.

"Some growers were of the opinion that the mites were more injurious where the bulbs remained in the ground two or ~~three~~ years as compared to those which were lifted more frequently. This opinion was not substantiated by the results of observations in naturalized plantings in Virginia and North Carolina, in which instances the bulbs were found to be healthy and in excellent condition.

"The bulb mite was also found to attack several Lilium candidum plants in a small planting at Mayfield, Calif. The nature of the injury demonstrated beyond doubt that it was a primary pest on this host. This verifies previous records received by the Bureau of Entomology in which it was reported to be a serious enemy of Lilies.

"In addition to the above records the mite has been reported by California Department of Agriculture officials, and also by one of the largest iris growers of that State as causing considerable injury to Dutch and Spanish iris.

"It has also been found by Bureau experts to infest such major crops in greenhouses as Asparagus plumosus, A. sprongeri, and smilax. In those cases the source of infestation may have been



through the growing of imported bulbs close to these crops.

"The European Tulip Aphid.

"The subterranean form of this introduced species of aphid, Anuraphis tulipae Boyer, also known as the iris aphid, Aphis iridi Del Guercio, has been intercepted repeatedly in shipments of imported iris rhizomes, and Spanish iris bulbs.

"On this survey it was reported as being quite a serious pest of tulips, iris and freesias, especially when the bulbs are dormant or in storage. It does not appear to be a serious pest of the growing bulb or plant. According to the California Department of Agriculture officials, as well as some of the larger growers, this aphid is quite a pest in seed and agricultural stores where bulbs are kept in storage before they are sold. Under storage conditions this aphid is easily controlled by treating the infested bulbs with nicotine dust, or calcium cyanide in a fumigatorium. It might be of interest at this point to refer to an article called to my attention by D. B. Mackie and which was published by F. V. Theobald in the Journal of the Ministry of Agriculture, London, May 1925, Vol. 32, No. 2, p. 154. In it the author points out that the subterranean form causes carrots to split underground.

"Conditions on the Eastern Coast.

"At the suggestion of officials of the Bureau of Plant Industry a survey was made of some of the long established and naturalized





plantings of narcissus bulbs in North Carolina, Virginia, and Maryland to determine the present status of insect and mite infestation in the Eastern Coast region. If the original plantings which had not been subsequently exposed to infestation from imported bulbs were found to be free from infestation with the bulb flies and mites, it would indicate that these pests were not established in this section of the country and that bulbs in such plantings might afford a source of supply of clean and uninfested stock.

"Accordingly naturalized plantings of narcissus in Elm City, Willard, Wilmington, and Southport, N. C., in localities where no foreign stock had recently been introduced were examined and found to be apparently free from bulb fly and mite infestation. The original stock in two of these naturalized plantings in North Carolina was believed to be over one hundred years old, and in one case definite records show that bulbs from this source had been growing in the same location at Southport for at least 34 years. Unfortunately in the case of one of these uninfested naturalized plantings at Wilmington, N. C., imported bulbs were introduced from Holland during the fall of 1924 and 1925, which were found to be slightly infested with the lesser bulb fly and the bulb mite. At Castle Hayne, N. C., a shipment of King Alfred bulbs just received from Holland was heavily infested with the larger narcissus fly, Merodon equestris. Similarly, another lot of bulbs recently import-



ed and planted at Orton Plantation, near Wilmington, N. C., was found to be infested with the lesser bulb fly, Eumorus strigatus.

"In commercial plantings in the Tidewater region of Virginia, where the bulbs were being grown for cut flowers, infestation with the lesser bulb fly was noted only where bulbs had been imported from Europe during the past two or three years. A light degree of infestation with this fly was present in two of the six fields examined and this infestation appears to have had its origin in imported bulbs, since in each case recent introductions had been made. No bulb flies were found in the other four plantings where the original stock was unmixed and no foreign stock had been introduced. In one of the infested fields already mentioned the lesser bulb fly was found infesting native stock which had been lifted last year, and replanted, and it was also present in stock received from Holland during the last two or three years.

"In a naturalized planting of narcissus near Silver Spring Md., where the bulbs are grown for cut flowers, a sample of 600 bulbs was examined. Of these approximately three dozen were slightly damaged and they were cut open for further examination. No evidence of infestation with either of the bulb flies was found, but traces of a few bulb mites were found in several bulbs. All other bulbs appeared sound and clean.

"In plantings of bulbs examined during the growing period





which had been growing at Long Island, N. Y., for two or three years, Mr. C. F. Doucette of the staff of the Bureau of Entomology, reported the absence of both species of bulb flies.

"The bulb mite was found in practically all lots of bulbs inspected, but the infestation was so slight that it was negligible, and usually occurred in decaying material as already mentioned.

"A significant feature of this survey is that the larger or narcissus fly was not found established in the bulb plantings examined in the Tidewater region of Virginia, North Carolina, Mississippi, or in Long Island, N. Y., in spite of the large numbers of bulbs that have been introduced into these regions during the last year or two.

#### "CONCLUSIONS.

"Except in a few instances, none of the pests discussed in the previous pages appears to be present and established in sufficient abundance to constitute a really serious menace at this time. Nevertheless, the tremendous expansion which the bulb industry is now experiencing may tend to increase the risk of future injury. This is especially true in view of the fact that the economic status of the larger or narcissus fly in foreign countries is definitely recognized, and the lesser bulb fly is recorded as an economic pest of onions and parsnips in





Europe. The lack of reliable and adequate information on their life history, habits, and control under American conditions makes it necessary, therefore, to study them thoroughly and determine their potentialities as possible pests of our staple agricultural crops.

"To meet the exigency of this situation, a field station was established by the Bureau of Entomology at Santa Cruz, Calif. because both species of bulb flies and the bulb mite occur there and could, therefore, be studied to advantage. Mr. C. F. Doucette was transferred to Santa Cruz in August, and in addition to the life history studies, will try to develop effective control and remedial measures. Recent tests conducted by him and Mr. C. M. Scott, Pathologist, with hot water treatments have given very promising results and appear to indicate that this treatment may prove effective in controlling both bulb flies, as well as the mites, and nematodes. The efficiency of hot water sterilization and vacuum fumigation with various poison gases is now being fully investigated."

Assistant Secretary Dunlap: This, I believe, closes the statements of fact which the Department cares to present at this time.

Mr. McHutchison: The gentleman has given us some data on infestation of bulbs, many of them from Oregon and California.



May I ask him if those infestations were on imported bulbs?

Mr. Weigel: The object of this investigation<sup>was</sup>/to determine the extent of the establishment of these pests on bulbs grown in the United States for periods of more than two years and upward. We did find infestation on recently imported bulbs; in such cases where we had an opportunity to examine them. At the time that I was on the West Coast the bulbs were not yet arriving. In one particular case in North Carolina there was a heavy infestation of the larger fly present in the bulbs.

Mr. McHutchison: Those figures of 5.4 and 2,<sup>per</sup>cents, were they with respect to imported bulbs or just bulbs without a record as to whether they were imported or not?

Mr. Weigel: They were previously imported from Europe, about three or five years previously.

Mr. McHutchison: Have you any figures as to the amount of infestation of imported bulbs as they arrive, not infestation in one case but the infestation on the total quantity?

Mr. Weigel: Mr. Sasscer has that information.

Assistant Secretary Dunlap: Mr. Sasscer, can you present that information at this time?

Mr. Sasscer: I think you will find that information in the circulars which have been passed around but which I did not read in order to save the time of the conference.





Mr. McHutchison: The statement has been made by the Holland people just prior to this conference that it is impossible to have an infestation of more than an average of one-tenth of one per cent in the cases. I was just trying to get at the facts, whether this infestation applies, first of all, to imported bulbs, and, second, whether it applies to the total quantity. I just wanted that as a matter of information.

Mr. J. Horace McFarland: If I may be pardoned, before the Department closes its case or temporarily rests, nothing at all has been said concerning the other eight bulbs involved in amendment No. 2, namely, *Chiliodoxa*, *Galanthus*, *Scilla*, *Fritillaria imperialis*, *Fritillaria meleagris*, *Muscari*, *Ixia*, *Eranthis*, etc. Are we to understand that there will be no presentation respecting those bulbs?

Assistant Secretary Dunlap: Mr. Marlatt, can you answer that?

Dr. Marlatt: I can answer that in this way. The findings with respect to these other eight bulbs have been negligible. There has been some slight infestation found among them. We have a statement on that subject. It has not been presented because we are trying to save time for discussion. I may say, however, that the infestation in each of those eight bulbs is negligible.

Assistant Secretary Dunlap: I note that the Department



has taken just about one hour in presenting the facts which are before us. We

We are honored with the presence of Mr. Walter W. Magee, chairman of the subcommittee of the Committee on Agriculture of the House of Representatives. I understand that he is compelled to leave shortly and we will call on him at this time if he cares to make any remarks.

Mr. Magee: I do not wish to interfere with the regular order of things. I understand that the ladies are to speak first. After they are through I shall be glad to make a few remarks.

Assistant Secretary Dunlap: We are ready to hear from the ladies representing the Garden Clubs, I believe. Mrs. H. I. Pratt.

Mrs. H. I. Pratt: Mr. Chairman: Over one hundred members of the Garden Club of America come to this conference representing an organization of nearly 6,000 amateur gardeners, whose principal object is to spread the love of flowers throughout the United States. It has interested itself very keenly in the findings of the Federal Horticultural Board and has been exceedingly sympathetic with certain of its decrees. Delegates from our organization have been very graciously received by the eminent chairman of the Federal Horticultural Board to whose self-sacrifice and devotion to the cause of entomological research the members



of this organization wish to offer their sincere appreciation. Several members of the Garden Club of America have had the privilege of talking with him at length upon the subject in question today. As an amateur representative of this organization, I shall not venture to interpret the law as our legal representative Mr. William A. Lockwood of New York is present, and I offer no opinion upon whether these pests to which the narcissus bulb is host are new or not widely prevalent and, therefore, subject to the regulation of the Federal Horticulture Board according to the law of August ... 1912; nor as an amateur representative shall I venture an opinion upon the interpretation of these restrictions, whether intended primarily for the protection of agriculture and horticulture in this country, they have not become of far greater protection to those growers who aspire to place themselves in competition with the long generations of European growers who have perfected their trade in methods of propagation and bulb sanitation.

Up to this time we are impressed by the emphasis which the Federal Horticultural Board had put upon the dangers which may come to this country on account of the continued importation of the European bulbs rather than upon the destruction which has taken place.

At this moment this organization is not convinced of the necessity for the restrictions about to be imposed upon European





grown bulbs of the Narcissus family on account of their infestation by the eel worm and the bulb flies, nor is it convinced of the necessity for the restrictions against Scillas, Chinodoxas, Galanthus, Branthis, Ixia, Muscari and Fritillaria.

We therefore, respectfully submit to the Federal Horticultural Board the following questions:

1. If these infestations of the bulbs of the Narcissus family were the menacing danger described by the Federal Horticultural Board, why has our country been subjected to the risk of devastation during the past three years? Why were not these bulbs excluded absolutely in December 1922? What has occurred during the past three years to make the future importation of European bulbs of the Narcissus family more dangerous for American agriculture and Horticulture than the importations of the past?

2. We understand that the Federal Horticultural Board concedes that in the Pacific states which must be looked upon as the natural propagation ground for our bulbs, the eel worm and the Narcissus flies are much more prolific than in the states of more severe winter climate.

3. Why will not the sale of an American grown bulb of the Narcissus family propagated in an admittedly infested region with no proved prospect of a certified Federal or State bill of health,



be more of a potential menace to the comparatively pest free States than an European bulb grown in a locality where bulb culture and sanitation are better understood and practised than in any other locality of the world?

4. What absolute and definite proof can the Federal Horticultural Board offer of recent transmission of pests from the Narcissus bulb to crops of alfalfa, clover, or onions in any country of Europe or in any locality of the United States of America?

We ask these questions not only in the name of the members of the Garden Club of America, most of whom are their own gardeners, but in the name of the women of America whose love of beauty is expressed in their joy in these Spring bulbs and who must count the cost of every penny they spend. We know from the rise in price of the Hybrid Tea Rose since its exclusion what the percentage of increase in cost of these bulbs may be. The Garden Club of America is no lover of pests. It knows them well; it knows their danger; and it abhors them. It will accept sacrifice if sacrifice is necessary. We repeat that we are not convinced of the necessity for this drastic action. We respectfully and earnestly petition that these restrictions be postponed until it can be established definitely and conclusively before an impartially appointed and composed board of economic and horticultural experts that the importation of these European bulbs of the





Narcissus family and the allied groups is an actual rather than a possible menace to American agriculture and horticulture. (Applaus

Mrs. Crowninshield wishes to read some letters from some of our members.

Mrs. F. B. Crowninshield: I have here some letters from members of the Garden Club of America. Here is one from Albert Krippendorf of Cincinnati, dated November 12, 1925, which reads as follows:

"About twenty-five years ago I planted several million bulbs, all imported from England and Holland. I have had no infestations of eel worms or bulb flies and I know of no crops of alfalfa, clover or onions that have been contaminated by these infestations.

"I am heartily opposed to Quarantine 37 as I am convinced there is no necessity of it. My brother, who also has a large collection of bulbs and who is at present in the Bahamas, has also expressed himself frequently as being absolutely opposed to Quarantine 37."

I have a telegram from Mrs. Violet H. Walker dated November 16, from Orange, Va., which reads as follows:

"Unable to attend meeting Wire protest to Secretary Jardine in capacity of president Federated Virginia Garden Clubs."

I have here a letter from Mrs. Bayard Thayer of Lancaster,



Mass. which reads as follows:

"We have planted thousands of narcissus bulbs for 30 years and have never had any danger of any kind to our crops. We have had only the greatest satisfaction from this planting and we are extremely anxious to have Quarantine 37 made inoperative."

I have here also a letter from P. S. Du Pont, Wilmington, Del. dated November 13, 1925, which reads as follows:

"I have been importing various varieties of narcissus from Holland for ten or fifteen years. These bulbs have been used largely for forcing, although many have been planted directly in the ground. These plantings are all adjacent to alfalfa plantings and not far from fields in which clover is used. I have never observed any trouble from fly or worm in the alfalfa or clover. Narcissus flourishes on my property and nearly all the varieties tend to multiply from year to year."

Here is another letter from P. S. Du Pont under date of November 13, which reads as follows:

"In regard to narcissus of American origin, I do not find that either those transplanted from our own out-door bulbs or American grown bulbs purchased in the American market are useful for forcing. American grown bulbs purchased last year and used for forcing purposes did not produce 50% of the number of flowers to be expected."





Then I have a letter from Mr. E. F. Du Pont of Winterthur, Del., under date of November 12, which reads as follows:

"I have grown narcissi in the state of Delaware for the past forty years and have naturalized them with great success by the tens of thousand - also many of the scillas, chinodoxa, and other bulbs on the prohibited list. During all that time I have never seen any trace of injury caused by the narcissi fly or the eel worm.

"For twelve years I have carefully watched alfalfa which is growing very close to my narcissi plantation and I have never seen the slightest evidence of an attack by the narcissi parasites."

Mr. Lockwood, counsel for the Garden Club of America, will say a few words here, if you will permit him to do so.

Assistant Secretary Dunlap: We have promised the ladies the first chance to speak. Are there any other ladies representing any other garden clubs?

Mrs. John W. Paris: I am president of the Federated Garden Clubs of New York State, an organization composed of sixty garden clubs and representing 10,000 women and men - interested not only in their own state and gardens, but in the development of every phase of horticulture throughout America. We feel that as Quarantine 37 now stands, it is comparable to the 18th Amendment, the very wealthy class of people can secure anything they may wish,





while those in modest circumstances must do without.

We believe that the exclusion policy of the Horticultural board is contrary to the spirit of the law, unscientific and injurious to horticulture and that the threatened embargo against the continued importation of Narcissus is unfair, unjust and not necessitated by any actual serious infestation of imported bulbs by fly, eel-worm or other pests.

We therefore feel that if these narcissus bulbs bring in to this country insects and diseases not heretofore known in this country, that for that reason and for that reason only their importation should be forbidden, that they should be shut out completely and that the system of special permits should be abolished so that none of these bulbs can come into this country; it furthermore being our opinion that the system of special permits is discriminatory, unfair and unreasonable.

Therefore the Executive Board of the Federated Garden Clubs of New York State respectfully asks that the proposed restriction on the importation of Narcissus and certain other bulbs, effective on January 1, 1926, be suspended, pending a thorough-going re-investigation of all of the facts bearing upon the case.

It is the opinion of members of this Board that all of the pests and diseases that the proposed embargo is designed to keep out are already here and that the continued entry of such bulbs



under the restrictions already prevailing or under slightly modified conditions will constitute no serious menace to the best horticultural interests of the United States. We do foresee injury to American Horticulture by the threatened shutting off of friendly cooperation among the more progressive plant-growing nations of the world.

Mrs. Robert A. Ware: I represent the New England branch of the Woman's National Farm and Garden Association and have been asked to come down from Boston for the special purpose of permitting the New England branch of that association to register its protest on this subject before the meeting. The New England branch of the association which I represent, through action of its executive committee taken on Thursday, November 12, wishes to go on record as follows:

Voted: (a) That on account of the familiarity of several members of our committee with bulb growing in Europe we are strongly of the opinion that Quarantine No. 37 is the basis of considerable misunderstanding.

(b) That we therefore respectfully urge that quarantine No. 37 be modified unless it can be proved without a doubt that importation of such ornamental plants and bulbs will bring insects or diseases which will be a serious menace to American crops.





(c) That a member of the Executive Committee be sent to Washington to attend the special hearing called for November 16 and to present a copy of this vote to the Federal Horticultural Board.

I want to say also that I have received a telegram from Mrs. Lena M. Phillips, national secretary, which reads as follows:

"Copeland asks that you represent National Farm and Garden with strong protest at conference Monday."

I would say that the Woman's National Farm and Garden Association is very glad to follow the Garden Club of America in the position which has been <sup>put</sup> forth by that Garden Club by its representatives here today, in each detail. I think it has been brought out we stand as an association solidly behind the Garden Club of America. It is unnecessary to go through those details again to you. The committee which has sent me here has followed very closely in the last few years the growing of bulbs on the other side and also during the last few years has been making amateur but valuable experiments relative to the results which they obtained, both with respect to imported and domestic bulbs. I would say also that the Farm and Garden Association stands particularly perhaps for the smaller gardens, for the women on the farms and in the smaller places. As was stated by the speaker for the Garden Club of America, the great appeal from those



women has come to us over and over again. I, therefore, without further words, will close with an urgent appeal from the committee that the threatened restrictions be not imposed.

Assistant Secretary Dunlap: Are there other ladies who wish to speak at this time?

Mrs. Crowninshield: I have one more letter which I would like to read. This letter which is dated November 7, 1925, and addressed to Secretary Jardine, is signed by the secretary of the Kirkwood Garden Club, Kirkwood, Missouri, and is as follows:

"As an organization, we the 'Kirkwood Garden Club' of Kirkwood, Missouri, wish to make formal protest against excluding Narcissi, January 1, 1926. We consider it unjust in principle, unnecessary and unreasonable.

"Individually we have used imported bulbs for many years and have found no trace of insect disease.

"A report from the Dutch bulb growers indicates that every precaution is taken to prevent any pests from being sent out of the country. Such successful efforts have been made along that line that at the Haarlem Experimental Station last year they had difficulty in finding diseased specimens with which to carry on their research work.

"Another point - It has been proven that these pests do not thrive in the colder climates of this country but do thrive





in California. Are we not now expected to get our bulbs from California? Then does this quarantine against imported bulbs destroy this evil?"

Assistant Secretary Dunlap: I wish to say that these papers, letters and other material must be sent to the desk or they will not be in the record and we will not be in a position to hand them to the secretary for his consideration. Are there any other ladies who wish to speak at this time, as opposed to the enforcement of the quarantine?

Mrs. Carrie Harrison: I am a farmer from Iowa when I am at home. I have been very much impressed and I would like to ask you two questions. It has seemed to me that the learned briefs presented by the attorney for the insect have been a bit jughandled, and I have wondered if the chairman of the Federal Horticultural Board were a botanist if the botanist could not present equally learned papers from the botany side. It seems to me that it is a bit one-sided. Then, I have wondered, why in the name of common sense you do not have a laboratory in Holland, why you do not investigate these bulbs at the point of departure, instead of when they got in here to us. (App\_lause.)

Then, I have also wondered why you should treat bulbs with more severity than you do human beings coming in here. Now, it seems to me that the factor which is worth more than the bulbs





would be to show a little good will for Holland. Have a laboratory over there at the point of departure. Were I the commissioner of immigration I would have my laboratory over there with regard to human beings, not here. This is no place for them in New York, and I have been through that place several times myself. (Laughter and applause.)

Now, there is another thing. Holland has been growing bulbs for before I was born, and that is a long time (Laughter.) and that has also been before many of you were born, I think all of you (Laughter). They know more about bulbs than any man in America, so far as I know the men in America. (Applause) Their gardens are, if we may trust such men as Mr. McFarland and other men who have examined them very carefully, one hundred per cent cleaner than our gardens are. The bulb-growing people keep their gardens cleaner than we do ours. I never saw a garden in Europe that was as full of stuff as my own. (Laughter)

Now, I think an ounce of good will toward Holland and the bulb growing countries would do more to settle this problem than anything else.

There is one more thing. I noticed for a long, long time --- you see, I was a member --- I am yet --- a member of the Agricultural Department, so you see what great courage I have to go after Dr. Marlatt that way. (Laughter) I know that



Mr. Saunders used to have much to do with the bulbs, and William Saunders, the man who founded the Department of Agriculture, knew more about bulbs than any of you. When Congress used to distribute bulbs I used to get folders and folders full of letters, although it was not any of my business to get them, letters about how much satisfaction the people derived from the bulbs. They wanted to know whether I could get them some more bulbs and I used to do everything I could to get them one or two more bulbs. Now, if all the garden seed and all the other stuff that Congress sent out was bad --- and I presume that much of it was bad --- (Laughter) just throw that into the discard, because those bulbs brought beauty and joy to the people who received them. They would write me and tell me that they had planted the bulbs and that they had sent them to Mary, William, John or somebody else who was ill, and how much Mary, William or John loved those growing bulbs. If everything else in the seed department was bad the bulbs paid for it all.

Now the difference in price is another thing. If American bulb growers can grow bulbs just as good as they can in Holland and can sell them for 5 cents apiece, two cents apiece, or a cent and a half apiece, all right. I saw acres and acres of Norway spruce growing in northern Norway and they were selling those trees for a cent apiece. If you can do that with your bulbs





go to it.

Dr. Marlatt: We would very much appreciate it if you would return the cards which have been distributed among the audience. Pass them along the line. I do not see that it will interfere with our business.

Mrs. Charles A. Easdie: I am from Plainfield, New Jersey. I live on a farm and have lived there for a good many years. I have grown daffodils within 400 yards of an alfalfa field and nothing has happened to the alfalfa. I also grow onions. I have been this year to Holland. I am interested in this subject and I am particularly impressed by the meticulous care with which they grow these bulbs. They are kept very, very clean. We all know that our gardens are not kept clean because of the shortage of labor. I wish to add the protest of the Farmer and Gardener. It is a large club and does much city work and tries to do its share. I wish that you would take more time and go into this much more carefully. Thank you very much.

Assistant Secretary Dunlap: Are there any other ladies that care to speak at this time in opposition? I may state at this time, if there is no objection, we will recess at 12:30 for one hour. I note, however, that there are some farmers in this audience, and we farmers are used to having an hour and a half for dinner, but I will say that since I have come to Washington



I do not have quite as good an appetite as I used to have on the farm. Furthermore, I find eating a little more expensive, so it does not take quite so long to get luncheon. If there is no objection we will recess promptly at 12:30 and convene at 1:30. I make this statement at this time so that you may make your plans accordingly.

Dr. Marlatt: There is a photographer present who would like to take a picture of the group as soon as we adjourn at 12:30. I suppose we will gather in front of the building. If I am not right I would like to have him say so. We will meet in the front of the building after this meeting has adjourned.

Assistant Secretary Dunlap: I believe that the picture should be taken at noon rather than later in the day because you are all looking good now although you may not be looking quite so good later on. (Laughter.)

William A. Lockwood: This is one of the rare occasions in modern life when there seems to be a real distinction between sexes. I am not a lady (Laughter) but I appear as a representative of the ladies. I am going to speak only about five minutes. The question before the Department of Agriculture at this time with respect to these bulbs reminds me of a story. In connection with what we have just heard from the ladies it reminds me of the story of the Indian who came before the judge



to acquire American citizenship and the judge told the Indian that he would have to give up three of his four wives. The Indian pondered for a few minutes and then said: "Judge, you tell 'em." (Laughter.) Likewise, my sympathy is with the Secretary of Agriculture when he tells them that this embargo is to continue. I have listened to the arguments or to the statistics. I have seen those ~~and~~ figures on the screen. It recalls to me lectures which I heard when I was a youngster with respect to the terrible germs in whisky, as I recall. We were not informed as to the nationality of those germs, whether they were American or foreign.

We recognize that these evils exist, but there is just one serious question here before this board, in my opinion. It is not a question of economics. It is not a question of protection to American industry. It is not a question of exclusion of foreign products, as naturally irritating and exasperating as such an embargo must be. It is simply a question for the Secretary of Agriculture, advised by the eminent Horticultural Board, as to whether or not the importation of bulbs from foreign countries constitutes a menace.

Now, that has been emphasized and emphasized throughout this proceeding. We must remember, however, that we have sides in this thing, which are interested, not because of pests. Every-





body dislikes pests. Everybody abhors pests but pests may be an advantage to some men. We do not question the honesty or good will of the Federal Horticultural Board but pests may be an advantage, and it is a difficult thing for the Federal Horticultural Board and for the Secretary of Agriculture to weigh the testimony which will be presented. There is one thing that must never be lost sight of and that is that the Federal Horticultural Board and the Secretary of Agriculture represent, in whatever action they may take, the people of the United States. The Board is neutral. The Board is not concerned with carrots and certain crops over other things. The Board must be convinced and it must so advise the Secretary of Agriculture that if this thing continues, this thing which has been going on for three years, that there will be certain, definite destruction in this country. These figures remind me of Jerome K. Jerome's "Three Men in a B\_oat", in which Mr. Jerome or the author found a book on medicine, and you will recall that after he had read of all the various diseases he decided that the only thing he did not have was housewife's knee. Every other disease he had symptoms of. Here, we also have all these things, these dreadful maggots and flies, etc. They exist in this country. The question is, it seems to me, not whether or not they exist. That is known. The question is rather whether or not they do injury.



I do not know whether they do or not. How much injury is it doing? Is it another case of housewife's knee or is it a case of serious disease germs? Human disease germs are being carried about but the normally healthy person does not fall victim to them.

So far as I have read and heard the testimony today, the condition is not a serious one. If that is the case are we going to cut off these beautiful things which delight all people, at least the women throughout the land? Are we to cut off these plants which lend themselves so easily to flowering and planting? These common, everyday flowers which we see, are they to be cut off because of a mere p~~o~~otentiality or are we to know and to learn from you that there is a definite, positive menace, not to industry, but to our bread and butter. (Applause.)

Mr. McFarland: Mr. Secretary, I wish to say just a word on behalf of the Committee on Horticultural Quarantine which was organized on June 15, 1920 and which includes some 40 or more organizations, mostly nationally interested in horticulture from the scientific, educational and grower standpoint but not at all from the trade standpoint. This committee has maintained its existence and has canvassed this subject from time to time during the intervening years. At a meeting of its executive committee, held on November 6th last, it was resolved that the Committee on Agricultural Quarantine be heard at the bulb conference to be held





in Washington on November 16 and that it then request the Secretary of Agriculture to postpone the embargo against narcissus and other bulbs involved in the exclusion order until it has been more clearly shown to the public in general that the importation of such bulbs constitutes a serious danger of pest infestation to American horticulture and agriculture.

To that resolution I merely wish to add that it was the strongly manifested feeling of the executive committee of this organization that if there was not shown at this hearing upon indisputable evidence that the other bulbs involved in the exclusion order --- Scilla, Chionodoxa, Muscari, ~~Ilia~~ and the others --- did added damage, were infested, that without question their importation be continued as other importations without permit. Such, Mr. Secretary, is the burden of the message I am authorized to direct to this conference. (Applause.)

Mr. Vogelsang: Mr. Secretary, I merely wish to make a statement here. There are five gentlemen present who are superintendents of gardens in New York who would like to return this afternoon. I do not know them. I have not met them. Their names have been given to me. The few questions to be asked them are, I think, entirely pertinent to the issue, and with your permission I will call them up and ask them these few questions so that it may go into the record. The first name is Mr. D. L. Mockintosh.



Mr. Mackintosh: All right.

Mr. Vogelsang: What is your business, Mr. Mackintosh?

Mr. Mackintosh: I am a professional gardener, having worked at that profession for the last fifty years. I have been superintendent of private estates.

Mr. Vogelsang: You are employed on various estates?

Mr. Mackintosh: On one estate. I am now employed by Mr. Manuel Riando, Alpine, New Jersey. For five years previous to that I was in the employment of an estate in Minnesota.

Mr. Vogelsang: Have you planted and cared for the plant Narcissus?

Mr. Mackintosh: Since I was a boy.

Mr. Vogelsang: Have you handled it outdoors as well as indoors?

Mr. Mackintosh: I have handled it indoors and outdoors.

Mr. Vogelsang: In quantity?

Mr. Mackintosh: In quantity, by thousands.

Mr. Vogelsang: Have you imported narcissus?

Mr. Mackintosh: I have imported narcissus.

Mr. Vogelsang: Have you had occasion to grow them alongside/ of vegetables of useful kinds?

Mr. Mackintosh: Just now I run a vegetable garden of about four acres. Previous to the last five and one-half years



I ran a vegetable garden of 75 acres.

Mr. Vogelsang: Have you noticed any deleterious effect upon the vegetables from any pests that might be in the narcissus?

Mr. Mackintosh: No, sir.

Mr. Vogelsang: Have you ever experienced or found pests in the narcissus?

Mr. Mackintosh: Not noticeably.

Mr. Vogelsang: Have you grown onions?

Mr. Mackintosh: I have an acre of onions just now. Previously I had five acres of onions every year.

Mr. Vogelsang: Have you ever noticed any effect upon them from any narcissus pests?

Mr. Mackintosh: Not that I saw, and my eyes is fairly good. (Laughter.)

Mr. Vogelsang: Have you ever observed the narcissus to be affected by the eel worm or attacked by any fly?

Mr. Mackintosh: No, I never look for trouble. (Laughter and applause from the opponents to the quarantine.)

Mr. Vogelsang: What do you mean by that? Do you mean that you have never looked to see whether they are healthy or not?

Mr. Mackintosh: My narcissus have all grown up and are doing well.





Mr. Vogelsang: And none of the narcissus that you have grown is diseased, to your knowledge?

Mr. Mackintosh: Not to my knowledge; otherwise I would not continue planting them.

Mr. Vogelsang: All right. That is as far as I want to go.

Mr. Mackintosh: I may say that so far as my profession is concerned, those who are pertinent or impertinent to employ me -- if there is an embargo on this importation of narcissus there won't be the chance to beautify American estates, and I for one, would never want anything from the Pacific Coast, according to the statistics that you have given us today. As I am in New Jersey I will take New Jersey stuff and let the Pacific Coast keep its own. (Applause from the opponents.)

Mr. Vogelsang: You do not know, Mr. Mackintosh, that I am from California.

Mr. Mackintosh: That is all right. I have been there too.

Mr. Vogelsang: I will now call Mr. Thomas W. Head.

(Mr. Head took the platform.)

Mr. Vogelsang: Mr. Head, what is your business?

Mr. Head: I am superintendent of a private estate at Red Bank, N. J.

Mr. Vogelsang: Superintendent of what?

Mr. Head: I am superintendent of a private estate.



Mr. Vogelsang: In charge of what?

Mr. Head: I am in charge of the farms, the gardens, the greenhouses, and the whole estate.

Mr. Vogelsang: How long have you been engaged in that sort of business?

Mr. Head: For 35 years.

Mr. Vogelsang: Have you handled the narcissus plants in that time?

Mr. Head: By thousands of bulbs, yes, sir.

Mr. Vogelsang: Under glass as well as out of doors?

Mr. Head: Under glass and out of doors.

Mr. Vogelsang: In large quantities?

Mr. Head: Yes, in large quantities.

Mr. Vogelsang: Have you used the imported bulbs of this variety?

Mr. Head: I have, by the thousands.

Mr. Vogelsang: Do you raise any vegetables in connection with this estate?

Mr. Head: I do, to supply the family.

Mr. Vogelsang: You grow onions?

Mr. Head: I do.

Mr. Vogelsang: Have you ever observed the narcissus to be affected by the eel worm or attacked by the bulb fly?





Mr. Head: In all the thousands of narcissis which I have handled I have never seen any disease to affect them whatever.

Mr. Vogelsang: You have never then, observed, of course, any deleterious effect on the vegetables?

Mr. Head: None whatever.

Mr. Vogelsang: Have the narcissus which you have handled in your experience, to your own knowledge, ever been affected by any other disease or insect than the three which I have mentioned?

Mr. Head: None whatever.

Mr. Vogelsang: I think that is all.

I will now call on Mr. Klinehinst.

(There was no response.)

Mr. Vogelsang: He apparently is not here. I will then call on Mr. Tansey.

What is your occupation, Mr. Tansey?

Mr. Tansey: I am superintendent of an estate for Mr. H. M. Tobert, of Tuxedo Park.

Mr. Vogelsang: How long have you been engaged in that business?

Mr. Tansey: For 24 years. I have been ten years in the present position.



Mr. Vogelsang: Have you had the care and planting of these bulbs under discussion here today?

Mr. Tansey: I have, thousands of them, in fact, millions.

Mr. Vogelsang: Have you handled them indoors as well as outdoors?

Mr. Tansey: I have handled almost as many indoors as I have outdoors.

Mr. Vogelsang: And these were the imported bulbs?

Mr. Tansey: Entirely.

Mr. Vogelsang: Do you grow vegetables in connection with your gardens?

Mr. Tansey: Yes, in quantity.

Mr. Vogelsang: Do you grow onions?

Mr. Tansey: Yes, in quantity.

Mr. Vogelsang: Have you ever observed in your narcissus any disease or pest caused by the eel worm or the greater or lesser bulb fly?

Mr. Tansey: Not at all.

Mr. Vogelsang: Then, you have not seen any injurious effect?

Mr. Tansey: No.

Mr. Vogelsang: I mean, you have not seen any injurious effect with respect to the vegetables from any such pests as have



been named here ?

Mr. Tansey: The only trouble I have ever had was with onions, and that was with the thrip. In my locality we all have our trouble with thrip, but that is entirely different from this.

Mr. Vogelsang: I do not know what thrip is. I would have to see Dr. Cobb for that.

I will now call Mr. Donald J. Crighton.

What is your business, Mr. Crighton?

Mr. Crighton: I am a professional gardener, the same as the other gentlemen.

Mr. Vogelsang: And you are now employed by whom?

Mr. Crighton: I am now employed by Mr. and Mrs. Paul Moore of Convent, N. J.

Mr. Vogelsang: How long have you been engaged in that business?

Mr. Crighton: All together?

Mr. Vogelsang: Yes.

Mr. Crighton: Sixteen years.

Mr. Vogelsang: Have you planted and cared for the narcissus bulb in that time?

Mr. Crighton: Yes, in quantities. Last year I planted 20,000 bulbs of the kind we are discussing here.

Mr. Vogelsang: And have you planted them both under glass





and out of doors?

Mr. Crighton: Yes, out of doors and have forced them.

Mr. Vogelsang: And in the 16 years of your experience you have planted a great many?

Mr. Crighton: Every year a considerable number.

Mr. Vogelsang: Do you grow vegetables there also?

Mr. Crighton: I do.

Mr. Vogelsang: Do you grow onions?

Mr. Crighton: Onions?

Mr. Vogelsang: Have you ever observed disease or injury caused by any of the pests mentioned here today on your narcissus?

Mr. Crighton: Never, in the onions.

Mr. Vogelsang: I asked you whether you had observed it on the narcissus.

Mr. Crighton: Never.

Mr. Vogelsang: Have your narcissus been all imported bulbs?

Mr. Crighton: Exclusively.

Mr. Vogelsang: You have found them uniformly all right?

Mr. Crighton: The only thing I ever found in the narcissus that was wrong was bulbs that I think were damaged in transit. They were shriveled up. There was nothing left absolutely but a sort of dry rot. That came about, undoubtedly, by being stored too near to a boiler or something of that sort.



Mr. Vogelsang: Were they infested with insects?

Mr. Crighton: Absolutely nothing to be seen of them.

Mr. Vogelsang: These gentlemen are now at liberty to return to their homes and to their occupations.

Mr. Charles H. Totty: I appear here as chairman of the committee on Tariff and Legislation of the Society of American Florists and Ornamental Horticulturists. We have already presented a brief which has been received by the Department. All I wish to add at this time is to have it read into the minutes. It will only take about three minutes. It reads as follows:

"With relation to the embargo on Narcissi bulbs which goes into effect January 1, 1926, strong representation was made to the Society of American Florists & Ornamental Horticulturists, at the meeting of the Board of Directors, January 26-27, asking the Society, through its Tariff and Legislative Committee to register a protest with the Federal Horticultural Board against the putting of this embargo into effect at this time on the grounds that it would damage the business of many florists who depend to a large extent on this flower to carry them through mid-winter.

"A motion made by Mr. J. F. Ammann, and carried by a majority vote is as follows:

"That it be the sense of this Board that the Tariff &





Legislative Committee be instructed to use all honorable means to have the Federal Horticultural Board delay the enforcement of any embargoes on any products imported into this country until, such time as a sufficient supply can be assured from our own country.'

"In accordance with this Resolution, the Committee on Tariff & Legislation, sent out a referendum vote to every member of the Society, asking them the following questions:

"'Are you in favor of instructing the Committee on Tariff & Legislation to ask the Federal Horticultural Board to defer action on the embargo on Narcissus Bulbs, that goes into effect December 31, 1925, until such time as sufficient home-grown stock is available for the Florist's use?'

Some 1516 votes were received. Of this 1345 were in favor of asking the Board to defer action, and 171 were against, showing a majority of 88.4% in favor of asking this Board to defer action until sufficient home grown stock is available for florist's use.

"With such an overwhelming majority in favor of a deferment we respectfully ask the Federal Horticultural Board to reconsider this matter on the ground that sufficient stock is not available in this country nor can we find out when it will be available. If the Board possesses information showing them



that sufficient stock is now available, this information should be immediately made public for the information of the florists:

"The florists' industry by its acquiescence in previous embargoes shows its willingness to assist the Federal Horticultural Board, on all reasonable rulings but insists that its business interests should be properly safeguarded.

"In accordance, therefore, with the wishes of the majority of our members, this Committee, respectfully asks the Federal Horticultural Board, to give the matter careful consideration, before permitting the embargo on Narcissus bulbs, to become effective."

Mr. McHutchison: Mr. Secretary, may I present the case of the Bulb Dealers' Association now?

Assistant Secretary Dunlap: How long will it take you to do that?

Mr. McHutchison: I think I can make pretty good headway in about 15 minutes.

Assistant Secretary Dunlap: We have only eleven minutes left.

Mr. McFarland: There is at least one representative of the Massachusetts Horticultural Society who desires to be heard from the amateur or educational side. He informs me that it will take only 15 minutes to present his case.





Assistant Secretary Dunlap: If there is no objection we will hear from Congressman Magee.

Congressman Magee: I want to say a few words. I am here at the request of a prominent constituent of mine who has asked me to appear to protest against this prospective quarantine. I cannot comply with that request because I have not sufficient facts to reach a conclusion in my own mind; and, furthermore, it is a question of administration and responsibility, as ~~you~~ suggested by my friends from New York. The responsibility is upon the Federal Horticultural Board, and I believe the only question is whether the importation of these bulbs would be a menace to this country.

Now, the Government appropriates millions of dollars every year to eliminate pests introduced into this country, those pests having been introduced through the importation of foreign commodities. To illustrate that p~~o~~int, take the single instance of the gypsy moth which we have been fighting for years to prevent it from getting into the Catskill and Adirondack Mountains. The State of New York last year appropriated \$150,000. We appropriated last year something like \$700,000. Then there is the corn borer, Japanese beetle and so on indefinitely. I am not going to assume any responsibility in the determination of this question. That is entirely within the province, under the law,





of this Federal Horticultural Board, and I have the utmost confidence, the absolute confidence, that whatever action this Board may take in the premises will be based absolutely and wholly in their judgment, upon the public interest. (Applause.)

I have another suggestion to make. I notice from this slip which has been passed around that copies of the stenographic minutes can be procured at 15 cents a page. The hearing here might cover three or four hundred pages. Fifteen cents a page for a citizen to pay if he wants a copy is quite a good deal. Perhaps we cannot interfere with the law in that respect, but it seems to me that it is the duty of the government in this important matter to see that the results of this conference are printed at the expense of the government. (Applause.) By that I mean, the position of the government, the reasons for its actions, and the contentions of those who appear here in protest. Now, I do not know what you have done on that line, but I want to suggest to the Board that when you get through with this conference I will be available here at any time to take up that matter and determine what the cost is and see if it is not possible to have the results of the conference printed and at a reasonable cost, made available for public distribution.

Dr. Randall: I would like to put that as a motion, to have this matter reprinted instead of having it typewritten.



Assistant Secretary Dunlap: You have heard the motion.

Is there a second?

Speaker: I second the motion.

Assistant Secretary Dunlap: You have heard the motion.

All those in favor will signify by saying Aye. Those opposed will indicate by s\_aying No. (After the vote) The motion is carried without a dissenting vote.

~~Mr. Simon~~ Simon: Could it not be determined how many people are opposed to this quarantine and how many people are in favor of it so that we could determine the wish of the majority?

Dr. Marlatt: No one can answer that question. There has been no referendum and no vote taken. You will hear both sides of the question before the discussion is over.

Assistant Secretary Dunlap: It is now five minutes before the time of adjournment. I would like to ask whether the opposition has finished. (After a pause) I should like to ask this question. How long is it likely to take the opposition? Can anybody answer that?

Mr. Vog elsang: I do not think that any one can answer that very well because no one knows who is in opposition. There is no community of interest.

Assistant Secretary Dunlap: Oh, I thought you were organized.





Mr. Vogelsang: Not that I know of.

Assistant Secretary Dunlap: There has been objection to the time I suggested of one hour for recess. Therefore, we will sp\_lit the difference. W e will be back here in an hour and fifteen minutes. I understand that the p hotographer is waiting for you in the court of the building and will take your picture.

(At this point, at 12:30, a recess was taken for one hour and fifteen minutes.)

#### AFTER RECESS.

(Pursuant to adjournment, the conference met after recess at 1:45 p. m.)

Assistant Secretary Dunlap: A complaint has come to the Chair that some of the speakers have not been heard, especially those speaking from the back of the hall. I hope that hereafter you will all come to the front or at least speak loud enough so that the reporter can get what you say.

We will begin where we left off before recess. I will entertain any one who cares to speak in opposition to the quarantine.

Mr. McHutchison: W\_\_ith your permission, Mr. Secretary, I will go forward to the platform. I am speaking for the American Bulb Dealers' Association, a commercial organization. We



are glad to have this opportunity, Mr. Chairman, of speaking before the Department of Agriculture.

Every year there are sold in the United States approximately four hundred and fifty million (450,000,000) flower bulbs.

Of these, about seventy-five per cent (75%) conservatively estimated, are handled by the firms whose names are affixed to this presentation.

All of these firms are American. Many of them have large investments in production in this country - growing bulbs which can be commercially produced here and experimenting with others. None of them have investments in bulb production in foreign countries. Including the wholesale, retail, importing and production phases of the bulb industry, these firms keep their fingers on the public pulse, maintain close and continuous contact with all sources of supply - domestic and foreign, actual and potential - and at all times are in a position to sense the reaction of the trade to outside influences.

Furthermore, while they endeavor to conduct their several businesses on a basis of reasonable, legitimate profit, they are also actuated by a sincere desire to promote horticulture - as an essential factor in the welfare and, indeed, the very existence of a successful prosperous and contented people.

With the foregoing explanation of our position and our





qualifications to speak, we, the undersigned, respectfully submit the following brief summary of our sincere and mature convictions in regard to the Narcissus bulb situation, and urgently request that you take these convictions into consideration in formulating the judgment which, as the recent statement of the Department advises, you are shortly to pronounce.

We should also point out (1) that at no time since the bulb conference of October, 1922, have representatives of the American bulb trade jointly expressed themselves; and (2) that neither at the conference just mentioned, nor at the public hearing on Quarantine #37 held in 1918, was the definite proposal to exclude Narcissus bulbs (either in 1926 or at any other time) put before the trade by the Federal Horticultural Board.

The announcement in December, 1922, that these bulbs would not be admitted for ordinary use after December 31st, 1925, came, therefore, as a sudden and unexpected (not to say unnecessary) action and one obviously predicated on other evidence than had been introduced at either the 1918 hearing or the 1922 conference.

#### ARGUMENT.

1. - Conceding that certain varieties of Narcissus bulbs are being produced in this country by replanting the offsets from imported bulbs, nevertheless, the domestic production as a whole is entirely inadequate to meet present demands. Furthermore





assurances that this supply ~~will be~~ sufficient in five, ten or fifteen years is based not on proved facts and accomplishments, but on assumptions and hopes.

2.- Denying emphatically any prejudice against American grown bulbs as such, we nevertheless affirm that, as yet, owing to insufficient knowledge and experience, unperfected methods of culture, curing, etc. Narcissus bulbs of the forcing varieties as grown in this country, particularly Paperwhites, are in large part unsatisfactory, or at least ununiform and unreliable for the purpose mentioned. Numerous carefully conducted trials under practical and commercial (as distinct from scientific or laboratory conditions) prove this.

3.- Conceding the existence in Holland and France of certain Narcissus pests and diseases (notably the greater and lesser bulb flies and the eelworm), we call attention to the fact that these pests are by no means new to and unestablished in this country. Herewith a few of the available official opinions in support of this contention:-

#### EELWORM (*Tylenchus Dipsaci*):

Ernst A. Bessey in "Phytopathology", Vol. 4, page 118, refers to his discovery of the organism in Kansas in 1907; also in South Carolina.

L. P. Byars in same journal, Vol. 10, page 91 - says,

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"Very probably it occurs in other parts of the United States and has been overlooked." Also, "It is highly probable that the parasite has been introduced into and spread within this country by this means (with cleaned and uncleared clover seed). Spread in the irrigated regions no doubt has been largely by water."

U. S. D. A. Bulletin 1229 says, "During the summer of 1923 the nema disease was found ... in great abundance at different points on Puget Sound, Wash., throughout the length of Willamette Valley, Ore., and southward along the coast as far as San Francisco, Calif."

G. H. Godfrey, in "Journal of Agricultural Research", Vol. 28, No. 5 says, "My subsequent discovery of the same nematode in the true dandelion '*Taraxacum officinale*', over a wide area in northeastern United States in July and September, 1923, made the problem of dissemination more interesting." (page 473).

C. F. Gillette, State Entomologist of Colorado, 37th Annual Report for 1924, page 27-28 says, "The eelworm (*Tylenchus Dipsaci*) ... has been found ... to be very widely distributed in Colorado ... It can probably be controlled by suitable methods of crop rotation".

#### NARCISSUS FLY (*Eumerus Strigatus*):

New Jersey Department of Agriculture in 1918 reported it "fairly abundant at Riverton, South Orange, and Rutherford".





Also that, "this insect has been noted in a few other eastern states".

Davidson (of Bureau of Entomology) in 1915 said, "It would appear that this European insect has a wide distribution over the United States, since it has been taken in the east, south and west".

Sasscer (of Federal Horticultural Board) in 1918 said, "This bulb insect is known to be established in the states of California, Washington, Colorado, Ohio, and Maine."

#### NARCISUS FLY (Merodon Equestris):

Reported by Headlee in Orange, N. J., in 1914; by California State Commission of Horticulture in Sacramento in 1915 and in San Rafael in 1914.

Discussed by Weiss in "Journal of Entomology" (February, 1916), under heading "Foreign Pests Recently Established in New Jersey".

R. C. Osburn in "Canadian Entomologist" (January, 1908) says the number taken in British Columbia "makes it seem certain that it properly belongs to our North American fauna".

It is also mentioned as well known in this country in articles by J. G. Jack in "Garden and Forest" in 1897, and by Packard in "Guide to the Study of Insects" published in 1869.--It certainly is not new.



Dr. Griffiths, U. S. Department of Agriculture, says

"Briefly, the Narcissus fly can be put out of business by the simple process of good cultivation".

Thus not only are these pests already established in this country (if indeed they are not natives) but they are most prevalent in the very localities where the bulb growing experiments are being made.

4.- Granting the desirability of preventing the further distribution of these pests, we submit that in view of the extent, development, experience and activity of the foreign phytopathological services (attained largely since our Plant Quarantine Act was passed in 1912), the control and possible extermination of the pests are much more likely in Holland and France than in this country. Also that, in consequence, the unrestricted distribution of Narcissus bulbs from the growing fields in infested sections of the United States is fraught with far greater danger than the restricted, supervised and certified importation of foreign stock as at present.

In other words, we submit that to shut off a supply of bulbs of high quality and a high degree of cleanliness and to offer as a substitute an inadequate, higher priced supply of bulbs of no higher quality and of unquestionably lower grade as to healthfulness - produced in more generally infested territory - is illogi-



cal, unwise and unjust.

5.- Of the 100 millions or more of Narcissus bulbs imported annually, fully 80% are forced in greenhouses, mostly in the eastern states; these forced bulbs are then destroyed after having performed their function of producing out-flowers during the winter months. Since these bulbs are not planted in open ground in this country, it is obvious that they can not constitute a pest-menace.

6.- Under the restrictions authorized by the late Secretary Wallace, coming into effect January 1st next, bulbs intended for forcing are shut out while bulbs intended for planting out are allowed in under special permits. Clearly this is anomalous as only those bulbs which reach the open ground could possibly become a pest-menace.

7.- The Plant Quarantine Act clearly empowers the use of quarantine only as an emergency measure. If the pest-danger were acute in the case of Narcissus bulbs, it would have been nonsensical to have given three years notice of the quarantine, as was done. The quarantine, if warranted at all, should have been immediate and absolute.

8.- The progress, purchasing power and horticultural enthusiasm of this country is such that last year (1924) the importations of Narcissus bulbs from all sources - France, Holland, England and the Channel Islands - plus the limited production in





this country, were not nearly sufficient to supply the demand for them.

9.- Assuming that a domestic supply sufficient to meet home needs could be counted on ten or even five years hence, such a lapse of time would result in serious and possibly fatal disturbance of the trade in these commodities. It would cause (1) the omission of the items from many catalogs; (2) the gradual but inevitable discarding of these items by the gardening public; and the ultimate, permanent loss of these materials to the nation's horticulture - except as rare, scarce objects beyond the reach of all but the few.

The loss of foreign Narcissus bulbs to American horticulture would thus be serious and deplorable, both in itself and as an illustration of the principle which governs the present policy, namely the belief that 100 per cent exclusion is the only means of protecting the country.

We ask if the progressive pursuit of such a policy, involving such consequences, can be justified on the grounds that it may serve to delay the introduction of certain plant enemies that might prove injurious?

#### THE APPEAL

Reaffirming our appreciation of the importance of sane and reasonable precautions against the invasion of the country by new



and dangerous pests:

Realizing fully the burden of multiple duties and responsibilities that rests upon your shoulders and the difficulty of giving personal attention and study to any single problem such as this; but

Recognizing that, under the law, you alone have the authority to prevent the unnecessary and unjust trade interference and injury threatened by the Narcissus bulb embargo as now scheduled; and finally

Assuring you of our desire to cooperate wholeheartedly in the performance of every essential step for the best interests of the country.

We respectfully ask you, Sir, to

1. - Give your careful, personal consideration to the matters set forth herein.
2. - Rescind, or indefinitely postpone the enforcement of, Amendment 2 to the Regulations supplemental to Quarantine #37, especially as it affects Narcissus bulbs, so that an established, legitimate branch of the bulb industry may continue and a plant commodity both desired and needed by the American public may be provided in undiminished quantity for their benefit, gratification and permanent good.

3. - Consider as an equally effective means of according





protection and stimulation for American bulb growing (if this be deemed necessary), the recommendation and support of a tariff, such as has been legitimately employed for that purpose in connection with our industries in the past.

American Bulb Company, Chicago and New York

J. J. Barnard Co., Chicago.

Beckert's Seed & Bulb Company, Pittsburgh

Joseph Breck & Sons Corporation, Boston

Burnett Brothers, New York

Atlee Burpee Company, Philadelphia

John Lewis Childs, Inc., Flowerfield, N. Y.

Henry C. Dreer, Philadelphia and Riverton, N. J.

Elliott Nursery Company, Pittsburgh

R. & J. Farquhar & Company, Boston

Fiske Seed Company, Boston

Thomas J. Grey & Company, Boston

Henderson & Company, Chicago

Henry & Lee, New York

Chester J. Hunt, Little Falls, N. J.

Roman J. Irwin, Inc., New York

MacNiff Horticultural Company, New York

Wm. Henry Maule, Inc., Philadelphia

McHutchison & Company, New York

Charles F. Meyer Company, New York

Henry F. Mitchell Company, Philadelphia

S. S. Pino, Providence, R. I.

Max Schling Seedsmen, Inc., New York

Charles Schwake & Company, New York

S. S. Skidelsky & Company, New York

Stumpp & Walter Company, New York

Tomplin Bradley Company, Cleveland, Ohio

Vaughan's Seed Store, Chicago and New York

Hosea Waterer, Philadelphia

A. D. Miller, Jamaica, N. Y.

F. R. Pierson, Tarrytown, N. Y.

Eight Floral Company, New York

Peter Henderson & Company, New York

Wm. H. Hunt & Company, New York

Andrew R. Kennedy, Inc., New York

W. E. Marshall & Company, New York

Muller-Sealey Company, Inc., New York



John Scheepers Inc., New York  
 Ralph H. Ward & Company, Inc., New York  
 Currie Bros. Company, Milwaukee, Wisc.  
 Wm. F. Kasting Company, Buffalo, N. Y.  
 J. H. McCullough's Sons Company, Cincinnati, Ohio  
 The Meyer Seed Company, Baltimore, Md.  
 The Moore Seed Company, Philadelphia  
 James Vick's Sons, Rochester, N. Y.  
 Wood & Company, Cleveland, Ohio  
 Walter H. Cook, Inc., Cleveland, Ohio  
 Market Gardeners Seed Company, Cincinnati, Ohio  
 H. W. Buckbee, Rockford, Ill.  
 I. M. Simon & Son, Philadelphia  
 St. Louis Seed Company, St. Louis, Mo.  
 T. J. Wood & Sons, Richmond, Va.  
 C. S. Brent Seed Company, Lexington, Ky.  
 Beckert's Seed Store, Pittsburgh

This, Mr. Chairman, was signed by a committee of three, who were authorized by this organization which takes in about fifty of the principal bulb dealers in the United States, many of whom have interests in bulb-growing here and who are not interested so much where the bulbs come from but they want to protect, so far as possible, their own business. What we really ask the Secretary of Agriculture to do is to have the Federal Horticultural Board return to the law itself. Rightly or wrongly, we have the idea that they have strayed from that original purpose in this embargo on narcissus bulbs and we want them to return to that.

As I understand the law, if a quarantine is imposed at all it should be imposed on a specific class of products from a specific country and for a specific purpose. In other words, suppose a disease is found on the Chinese sacred lily, which of course,



is a narcissus coming from China, that would warrant the Board in shutting out that plant from that locality, but it would not warrant or justify the Board in shutting out all classes of bulbs from all other countries. That is the distinction we make there. Then, the quarantine should be only an emergency measure and if it is found necessary by the Board to quarantine a certain class of plants from a specific locality, from a specific source, then that quarantine should be upheld if the bulbs are quarantined as to one class of firms, then the quarantine should also be applied to other firms, to other classes of firms; in other words, we have discrimination not as regards individuals but as regards classes of business. I had something to do with the law before it was passed. One of the features that was brought up there was that we were afraid of having trade interference, unnecessary trade interference, and we were assured that there would not be any unnecessary interference with trade.

Another matter that was brought up was this. We asked the question: Is not it possible that some over-zealous official would handle the law in a circumscribed manner, and we were assured that we would be protected from that by the hearings that would be called prior to any quarantine. Now, as far as I know, there has been no hearing called by the Department of Agriculture to consider the embargo upon narcissus bulbs. We are referred back to a





hearing in 1918, to a bulb conference in 1922, but there has been no opportunity to consider what an embargo on narcissus bulbs was for and giving us a chance to come prepared to answer that statement. Before I go any further I want to read from one or two statements made officially in proof of what I have just said.

For instance, in the Department of Agriculture circular No. 37 on August 11, 1911, just before the law was passed it was said "Legislation is now sought, not to hold up the trade in import stock, but to throw such safeguards around it as will most protect both the importers and the subsequent purchasers of such stock. Then, again, the House report and the Senate report in July 17, 1912, that is, before the law was passed, speaking on the legislative intent, said: "In the quarantine provisions of this section the particular plant containing the danger is excluded and no unnecessary restrictions are to be placed upon other other plants not affected by such quarantine."

Then, again, with regard to the groundless fears. "The fears are absolutely groundless that the Department of Agriculture in enforcing this section of the foreign quarantine would unnecessarily interfere in any way with legitimate importation of plants." That was by James Wilson, the then Secretary of Agriculture.

With regard to the fear of one man getting control of this law, for instance, Mr. James Wilson, the Secretary of Agriculture



at that time, stated on August 19, 1911, "The fear that is expressed that some one person will have arbitrary powers over the entire import nursery stock business is quite unfounded." Now, our viewpoint is, Mr. Chairman, if there is to be a quarantine, if in the judgment of the Department of Agriculture they insist and think it is wise for the country to have a quarantine on narcissus bulbs, let it be absolute. Don't discriminate as to classes. Don't say one class of users cannot import those bulbs while another class of users can. You know, there is always a great deal of objection between commercial classes, and why force one class to go to another class to buy those same infested bulbs at perhaps three or four times the price. In other words, this quarantine seems to us, and we are speaking as commercial men, just as unreasonable as if you were to shut ships out of the New York harbor for fear they might bring in the mumps or the measles. There are narcissus diseases wherever narcissus are grown, whether in Holland, France, China, <sup>or</sup> the United States. You cannot separate the bulbs from those diseases, and whenever we have bulbs we will have those diseases.

Our request is stated in this presentation, to indefinitely postpone or repeal Amendment No. 2 which takes in narcissus bulbs and the other five classes.

Now, I have a great deal of material here with regard to





those three diseases that have been mentioned. I do not think it is necessary to read them. I think it is pretty clearly demonstrated that those three diseases are not new to the United States, that they are pretty widely distributed. In fact, with the *Tylenchus Dipsaci*, there is a question if it has not been in this country for at least a hundred years. According to one authority it has been in this country for more than one hundred years and was brought here by the ships which used to fetch lumber to Europe and return with ballast. It may have been brought in at that time. The others say it must be a native. But it certainly is not new to this country.

At a hearing that was held before the Board on October 2, 1923, the public hearing was to consider the advisability of quarantining the states of Oregon, California, Colorado, Washington, and Idaho on account of injurious eel worms new to or not hitherto widely distributed or prevalent throughout the United States. I have got several pages of very interesting data that was taken at that hearing. I will only take up the time of the meeting with reading one of those. It comes from the chairman of that meeting, Dr. Marlatt, and it is thus illuminating and it is reasonable.

(There was some good-natured laughing at this point.) I just want the chairman to be as reasonable in the future as he was at that time.



Dr. Marlatt: All the chairman's statements are reasonable.

Mr. McHutchison(Reading): "The Chairman: ' I said at the

beginning that the quarantine action must necessarily depend on some restrictive distribution. We can not begin quarantining a section when the disease is probably there and confessedly is elsewhere. If we are not restricting the distribution of a particularly virulent strain I don't see any point in quarantining a section to protect another section when that other section confessedly has it in some form or very possibly has it. We don't put on quarantines for fun. They must have some practical and useful purpose. If we are led to believe that this worm is climatically controlled in the East and normally occurs here probably: especially as it had had opportunity, and has been distributed quite widely throughout the whole United States, -- I would be very slow to consider quarantine action with all the factors that have been presented. There is the seed distribution, the bulb distribution, water and wind spread, and a lot of other factors.' "

We merely wish the Federal Horticultural Board to be as reasonable in considering these pests, so-called, coming in from the other countries as they were reasonable in this hearing. Why shut out bulbs that are of so much use to many people because they bring in diseases which always must accompany bulbs and which, according to all of the evidence we have and which are already here. They should





not be shut out, as we understand the law, because they are not new or hitherto widely distributed within or throughout the United States. They are already here. I think in this case, Mr. Chairman, that the embargo would be infinitely worse than the disease we have. (Applause from the opponents to the quarantine)

Mr. Vogelsang: There are two or three, I think, who would like to make a statement in the nature of those that we had this morning. If I may take a moment, I would like to ask them some questions. They will be very short. I will first call Mr. Kahn.

Mr. Vogelsang: Mr. Kahn, what is your occupation?

Mr. Kahn: I am a grower of cut flowers.

Mr. Vogelsang: Where?

Mr. Kahn: In New York City.

Mr. Vogelsang: How long have you been in the business?

Mr. Kahn: Twenty-five years.

Mr. Vogelsang: Have you handled, planted and cared for narcissus?

Mr. Kahn: Yes.

Mr. Vogelsang: You handle the bulbs?

Mr. Kahn: Yes.

Mr. Vogelsang: Both under glass and out of doors?

Mr. Kahn: Under glass.

Mr. Vogelsang: In quantity?





Mr. Kahn: Millions and millions and millions.

Mr. Vogelsang: That is three millions. (Laughter)

Mr. Kahn: A good many more than three million.

Mr. Vogelsang: You are not a vegetable grower or anything of that sort?

Mr. Kahn: No.

Mr. Vogelsang: Have you found these bulbs that you receive, that they are generally healthy, or otherwise?

Mr. Kahn: Always healthy.

Mr. Vogelsang: Have you found the eel worm and narcissus fly in them?

Mr. Kahn: I have seen in all my experience maybe a half dozen. In all the millions I have handled.

Mr. Vogelsang: Is that so? Well, that is very good, I should say, That is all. Is there anything further you wish to add?

Mr. Kahn: I might also speak of the group of New York buyers of bulbs for cut flower purposes. We feel about the embargo that as far as we are concerned the embargo is a very serious thing. We feel that we do not take any change at all with these bulbs coming in from Holland, as far as flowering bulbs are concerned. We think there is no risk at all. Any man who supplies me with bulbs will guarantee that they will flower to a very high degree. It represents a perfectly



safe investment. As far as the American grown bulbs are concerned, not only is the price prohibitive, because our business differs from anybody else's business who handles bulbs. The man who handles narcissus in pots makes his own price on them. the bulbs are double he puts on a price that is double. But with cut flowers, the price of the product is absolutely out of our hands. We take what we can get for it. We absolutely do not put the price on it. Even with the high price that the American bulb growers ask, they do not stand behind their bulbs. I have asked many to supply me with American-grown bulbs, and they supply me with bulbs, and that is all, no guarantee behind them. That means, that on account of the price and the uncertainty of the flowering quality of the American grown bulb, we decided in New York -- I think in New York City we grow close onto ten million bulbs -- that if the embargo goes into effect we will go out of business. It is impossible to grow bulbs here except at a high price and no American bulb whatever has the flowering qualities.

Mr. McFarland: I would like to ask the gentleman what be comes of these bulbs after he has forced them?

Mr. Kahn: We destroy them.

Mr. McFarland: They don't get into the ground?

Mr. Kahn: No.

Mr. McFarland: There is no possible way that they may contaminate onions or beans or something of that kind?





Mr. Kahn: No.

Mr. McFarland: I submit, that that should be taken into consideration.

Congressman Free: May I ask the gentleman how he discovered the pests that he said he discovered?

Mr. Kahn: I discovered it in certain narcissus. I do not know the name right now. Some of you gentlemen probably know. It was not the Paperwhite. It has a white, creamy color. One narcissus one year had some bulbs that refused to flower. We cut them open and we found worms in there. That is my only experience.

Congressman Free: By cutting them open, did you see it with your naked eye?

Mr. Kahn: Yes.

Congressman Free: Do you know that you cannot see them except with a strong microscope?

Mr. Kahn: Well, then, it was something else. (Applause and laughter.)

Mr. Vogelsang: I would like to suggest to the distinguished representative from my state, Mr. Free, that what the gentleman discovered was probably a worm which was large enough to see and was not the eel worm you speak of which is almost microscopic.

Dr. Randall: I would like to ask the gentleman a question.



Assistant Secretary Dunlap: Will the gentleman yield?

Mr. Kahn: Yes.

Dr. Randall: What do you pay at the present time for narcissus bulbs?

Mr. Kahn: Different prices. If I had to average them in the port of New York I would average them at around 40, maybe 45. That is a big item. You cannot just answer that question. There are some three times as high as that.

Mr. Vogelsang: What do you mean by 40 or 45?

Mr. Kahn: I mean 40 or 45 dollars.

Mr. Vogelsang: Forty or 45 dollars per what?

Mr. Kahn: Per thousand. It is not the average. Narcissus means a lot of things. They vary in price from \$10 to \$75 a thousand.

Dr. Randall: You would not be willing to state what prices you pay, then, for the different varieties?

Mr. Kahn: Yes. You mean, I should state them now? If you will give me a specific question I will be glad to answer it.

Mr. Vogelsang: I think that is rather irrelevant.

Dr. Randall: Mr. Chairman, that is quite an important question from what is going to transpire later. I would like to ask the gentleman what prices he is paying for narcissus bulbs from abroad.

Mr. Kahn: Those prices are not secret. They are printed in



every trade paper every day of the year. Any price which I pay the rest of the trade pays. There is no secret to it.

Dr. Randall: You would not be willing to state the prices, then, in open meeting?

Mr. Kahn: Yes.

Dr. Randall: You could have done that quicker than make this adverse argument.

Mr. Kahn: If you will state any particular variety I will be glad to answer you.

Mr. Vogelsang: Of course, that is a phase of the question which we consider is not in the case at all, what the prices are of bulbs anywhere at this time. I will call on two or three other gentlemen. One is Mr. Bickley.

Mr. Milton H. Bickley. All right.

Mr. Vogelsang: What is your residence?

Mr. Bickley: Wallingford, Pa., the Bickmore Greenhouses

Mr. Vogelsang: Wallingford, Pa?

Mr. Bickley: Yes.

Mr. Vogelsang: What greenhouses?

Mr. Bickley: The Bickmore Greenhouses. I have a cold. You will have to excuse me.

Mr. Vogelsang: Are you the proprietor?

Mr. Bickley: I am the proprietor of my place out there.





have some one hundred acres.

Mr. Vogelsang: What is your experience in the handling of narcissus?

Mr. Bickley: I have been handling bulbs for twenty-nine years.

Mr. Vogelsang: Both out of doors and under glass?

Mr. Bickley: Yes, sir.

Mr. Vogelsang: Have you handled them in quantity?

Mr. Bickley: I grow them by the million.

Mr. Vogelsang: Are they imported narcissus?

Mr. Bickley: At this present time I have only 200,000 Paperwhites.

Mr. Vogelsang: Are they imported?

Mr. Bickley: Yes.

Mr. Vogelsang: Have you Holland bulbs on your plantation as well?

Mr. Bickley: Yes, I suppose I have three or four hundred thousand narcissus.

Mr. Vogelsang: Do you grow vegetables on your plantation?

Mr. Bickley: I have a dairy farm. I also have a chicken farm.

Mr. Vogelsang: Have you ever noticed the milk or the eggs infected with the narcissus fly?

Mr. Bickley: Just wait a minute, and I will tell you.



Mr. Vogelsang: That is only a joke.

Mr. Bickley: I know. I have ten acres of alfalfa. I grow about ten or fifteen acres of wheat and about fifteen or twenty acres of corn.

Mr. Vogelsang: Any onions?

Mr. Bickley: N o onions. I grow some other produce to supply my farm. As long as I have been on the farm I have never noticed the eel worm has affected my chickens or my crops. (Laughter)

Mr. Vogelsang: Have you discovered any of these pests on your narcissus?

Mr. Bickley: Never found anything on my place. I have a place out there, about one or two acres, where I planted about fifty bulbs about twelve years ago and they are still in the ground. They are in just the same position. I cut flowers off of them every year.

Mr. Vogelsang: They have never become infected or diseased?

Mr. Bickley: Nothing at all. They are just as good today as the time when I left them there.

Mr. Vogelsang: That is all.

Mr. B ickley: All right.

Mr. Vogelsang: Thank you, M r. Bickley. (Applause and laughter.)

Mr. Vogelsang: I will now call on Mr. Richter.





Mr. Richter, will you say something about your knowledge of foreign bulbs and your experience with them? We want you to be as brief as possible.

Mr. Richter: I represent Henry F. Mitchell Company of Philadelphia. We have been handling imported narcissus for thirty-five years. During that time I have been with them for 31 years, in which I have had a very close association. We are seedsmen and bulb importers. Our importations, of course, have grown with our business until at the present time they are about four million per annum. We distribute them all over the United States. We send them wherever our customers demand them. I have never in all my experience had any complaint from people who bought from us, about infestation. I took the opportunity a very short time ago to send out a letter to some seventy-five odd people, all of whom grow under glass and a good many of whom grow out of doors. I asked them if they could trace any infestation on their place, either out of doors or indoors, to narcissus, and every one of those --- 56 replied --- out of the 75 --- said absolutely no.

Mr. Vogelsang: Have you had experience with American grown bulbs?

Mr. Richter: Only so far as my own experimentation is concerned. I made tests with quite a few American bulbs last year. I am not prepared to say whether they are diseased or not. I can say



that we did get quite a variety of American narcissus this year that were diseased. As a matter of fact, I have some fifteen specimens from as many different varieties and from as many different places.

Mr. Vogelstang: In the United States?

Mr. Richter: Yes, sir. We ordered 50 for a test but could not plant one of the bulbs because they were absolutely diseased; they were nothing but dried up bulbs when we received them.

Mr. Vogelsang: In connection with your annual importation, what percentage or what number are used for forcing?

Mr. Richter: I should say between 80 and 85 per cent.

Mr. Vogelsang: What becomes of the bulbs after they have been forced?

Mr. Richter: They are invariably destroyed.

Dr. Marlatt: What method do you use?

Mr. Richter: They are burned. One man even went so far as to say that everything of that kind goes on the compost heap and he prides himself in what he calls specimen plants. I have his name and address.

Dr. Marlatt: I would like to ask one more question. I would like to know if you consider that throwing them out on the compost heap is destroying them; would that have any effect in destroying them?





Mr. Richter: I did not say I destroyed them. I said they claimed they destroy them. This one man to whom I referred was specific on that point. The other did not go into details.

Dr. Marlatt: I was merely interested in finding out whether those eighty or eighty-five per cent of bulbs used for forcing were properly destroyed. I was wondering whether merely throwing them on a compost heap could be considered as destruction and what chances there were of transformation or escape.

Mr. Richter: They are invariably burned, Dr Marlatt.

(Laughter.)

Mr. Vogelsang: What is the condition of the bulb after the forcing process is complete and the flower is cut and you reject it?

Mr. Richter: Please make that a little plainer.

Mr. Vogelsang: What is the consistency of the bulb, is it exhausted?

Mr. Richter: It is exhausted so far as its flowering qualities are concerned, yes.

Mr. Vogelsang: It has no further life?

Mr. Richter: It has life but no value, no commercial value.

Mr. Vogelsang: I think that is all unless you have something to say in addition.

like to

Mr. Richter: I would/make a statement that boars a little bit on what Mr. Kahn said a while ago. Our house placed an order





for 100,000 narcissus bulbs last year, anticipating that the embargo might take effect, and one of the conditions under which they were sold to us was that they would either deliver the goods or return the money paid for them, but that absolutely, under no conditions, would there be any flowering guarantee attached to the sale.

Mr. Vogelsang: Where did you place that order?

Mr. Richter: I rather think that it would be unethical for me to mention the name.

Mr. Vogelsang: In what country?

Mr. Richter: Here, in the United States.

Mr. Vogelsang: I was merely wondering if it was a foreign order or not.

Mr. Richter: No, I am speaking of American grown bulbs.

Mr. Vogelsang: All right. (Applause from the opponents.)

Mr. Vogelsang: I will now call on Mr. Boylan.

Mr. Boylan, will you kindly state your name?

Mr. Boylan: My name is Edward A. Boylan.

Mr. Vogelsang: Have you anything to say on this subject?

Mr. Boylan: I can supplement what Mr. Richter said from a commercial point of view. We are large importers of narcissus bulbs and we sell them to the commercial trade.

Mr. Vogelsang: What is your business?



Mr. Boylan: I am manager of the New York branch of Vaughan's Seed Store.

Mr. Vogelsang: You sell the bulbs to the retailer?

Mr. Boylan: And to the wholesalers also, and to the commercial greenhouses.

Mr. Vogelsang: What is your importation, approximately?

Mr. Boylan: Approximately five million a year.

Mr. Vogelsang: What is your report with reference to their health and freedom from these <sup>three</sup> diseases that have been spoken of here, the eel worm and the major and lesser bulb flies?

Mr. Boylan: We have no record of any complaint from any of our customers of the bulbs being infected with either of those conditions.

Mr. Vogelsang: I think that is all I want to ask you.

I will now call on Mr. Elliott.

What is your occupation, Mr. Elliott?

Mr. Elliott: I am president of the Elliott Nursery Company of Pittsburgh, Pa.

Mr. Vogelsang: Have you had any experience with the narcissus bulb?

Mr. Elliott: My house has been importing narcissus bulbs for nearly forty years. I have been connected with the house for about six years. Prior to that I was practising landscape archi-





teature and was associated with the house.

Mr. Vogelsang: In your experience have you handled these bulbs in large numbers?

Mr. Elliott: In very large quantities. We import substantially over two million bulbs a year.

Mr. Vogelsang: What is your judgment as to their health and freedom from the diseases which have been mentioned?

Mr. Elliott: I will give you my experience under two heads, first, as a practicing landscape architect for fifteen years when I had charge of numerous places. At that time I was planting them and had them under observation. At that time I planted them in an area stretching from the Gulf Coast in Mississippi up through Massachusetts and perhaps as far west as the Indiana line. I had the opportunity of visiting those plantings which sometimes would run into the hundreds of thousands at frequent intervals. I have never in my entire experience found any infestation or contamination of any material from any bulbs. I have, as a matter of fact, never noticed any infested bulbs. A horticulturist does not plant damaged material, not if he knows his business. Of course the material might be infested nevertheless. Just the same, it is a good deal like the physicians telling me that I am carrying germs of diphtheria, smallpox and heaven only knows what else, but I do not seem to be adversely



any  
affected by those germs. However, if there was/infestation or infection in those bulbs such infestation or infection did not spread to any other material which I planted in those various localities.

Furthermore, as president of the Elliott Nursery Company and being associated with that company for a great number of years, we have every year a very considerable collection of bulbs which we bring over for testing. We also have some bulbs left over which are not sold. We have a nursery plant at Springdale, Pa., at which we grow probably as complete a collection of herbaceous and deciduous material, together with some evergreen materials, as is to be found in the United States. That includes the family to which the onion belongs and the family to which alfalfa and clover belong. We have there five distinct sorts of soil.

Long before there was any question of quarantine we planted these bulbs literally by the thousands all over this nursery in direct connection not only with the lily family but all sorts of other material, all other families which are grown commercially, and I have never seen any infestation pass from narcissi to any of our other materials. There has never been any infection that I have ever been able to discover or which I could have the entomologist of the State of Pennsylvania point out to me, and I brought up that question on our property as a result of our plant-





ing of narcissi for thirty years from end to end. (Applause by the opponents.)

Mr. Vogelsang: Thank you, Mr. Elliott.

Mr. Vogelsang: I want to take the platform myself/<sup>now</sup>for a few moments. There are some observations that I desire to make and some exhibits that I desire to introduce. Now, these are notes which were made at random, Mr. Chairman, and they will be delivered more or less at random and will exhibit the degree of stuffing ~~with~~ a strange subject that an individual can stand within the period of two weeks, which is my acquaintance with the subject generally speaking, although it has been a matter of much interest to me for many years. So far as I am aware, the case for the complainant will be closed, in chief, at least, with this presentation. There may be some rebuttal, depending on what may be adduced hereafter.

I wish to say in the beginning also that we expect to brief this matter later for your consideration in a succinct form.

Generally speaking, ladies and gentlemen, and Mr. Chairman, we owe in the United States a great deal of our horticultural development to the importation of original stocks from abroad. These importations have continued since the birth of the republic. The first great American interested in the importation of foreign plants and shrubs and so forth was Thomas Jefferson. The results





of these activities in that direction are still manifest, at least in the city of Washington, in many of the rare plants that exist here and nowhere else.

This problem of infestation is one not peculiar to the United States but, as you know, is present in all civilized countries. It is a product and one of the penalties of civilization. The highly civilized citizen of the United States suffers from pests and infestations that the aboriginal and savage does not know anything about, and naturally, they come, and naturally they go. There are many cases of pest transference from one country to another, as the result of the immense trade in plants, fruits, and food stuffs, <sup>but</sup> the economic balance is vastly in favor of continuance of the traffic, of course, under reasonable, rational, and mutual regulation.

Complete immunity is an unattainable ideal. Commerce of all kinds may carry pests, and so may persons. In fact, complete immunity would not be assured if all commerce and all travel from one country to another were absolutely stopped. There are other uncontrollable carriers. We are able only to reduce risks, and we must as always act with due regard to the general welfare to our foreign trade and to the comity of nations.

True we have had serious infestations, and undoubtedly we have given serious infestations to other countries, but such



serious infestations are rare; as rare as destructive earthquakes are in the United States.

All these Narcissus pests have existed in Europe for centuries, but in spite of them the bulb industry has flourished and good husbandry has kept them so in check that the plants themselves are improved by constant care, and the pests have become of very slight economic importance.

These alleged pests have been imported upon bulbs into the United States for a hundred years, and it is probable that all of them are really native to this continent. At any rate, native or foreign, they are already so established and so fixed in the United States that continued importation under reasonable inspection and regulation can not exaggerate present conditions.

The forcing bulbs, of course, constitute no menace, since they never reach the soil, but are exhausted in greenhouses and are afterward burned or dumped, and it should be remembered that 95% of florists bulb imports are used for forcing and not for planting.

With reference to the eel worm and the reference that has been made by Mr. McHutchison here to a report regarding the proposed alfalfa embargo against California, Idaho, Oregon, etc., on account of the presence of eel worm, that report is full of information and fully justifies the Department in declining to





make an embargo. The report says that 20,000,000 pounds of clover seed were shipped out of Idaho from an infested district. Dr. Cobb stated this morning and there is in this report that the eel worm was found upon clean and dried clover seed imported from south Africa. Gentlemen, it is everywhere. Of course, I am a citizen of the State of California, a native of the State of California. I am thoroughly familiar with its tremendous alfalfa and agricultural resources. However, it took this investigation to advise me that we are suffering much from the damage of the eel worm or that, apparently, it is present there. Now, of course, on account of the impendency -- if you might use that expression --- of this embargo there has been an enormously increased importation this year for the purpose of meeting the condition immediately when the gate falls. It may possibly have resulted in some carelessness, some haste in the packing and inspection, and perhaps on account of the enormously increased importation a higher degree of infestation may have been manifested in some shipments.

One grower in Los Angeles this year purchased between one million and one million and a half Narcissus bulbs to go into the ground. In California and the N. W. three million Narcissus bulbs were planted this year.

The Long Island plantings increased by one to two millions. At Mobjack Bay, Virginia, one and a half millions have been planted,



and at Portsmouth, Virginia, five millions, consisting of six or eight varieties. Large plantings were also made at Bridgeton, New Jersey, and in Michigan at Potoskey, Benton Harbor, Grand Rapids, and Mount Clemens. And a great many of these were planted by Hollanders who are trying to save their bulb skins, and if the embargo is not enforced, which is our hope and prayer, I have no doubt that a great many of these will return to other markets.

It has been stated that there were unfavorable climatic conditions in Holland and a somewhat greater degree of infestation ~~may~~ have been apparent in some importations but they were passed into the country. They have been planted by the hundreds of thousands in different places of the United States, everywhere, and they have been planted for over fifty or one hundred years. They were not rejected or thrown back, and it would seem that the Board was not really panic stricken by what they discovered and that they were not fearful that the country would go to the demnition bow-wows if those bulbs came in, because they were passed, and of course, it is hoped by these foreign planters that they will get enormously high prices, as undoubtedly every one will if the foreign importations be shut out, and that will be the deprivation of the flower, really, to the person who most needs it and should have it. That skins the little home where a man with a small income who has got enough money to get a five-cent china bowl and a couple of handfuls of gravel and put some





water and stick a few bulbs in it that may cost him 10 cents or a nickel, and who can grow as beautiful a bloom in his own house as can be grown by those experienced and well fed superintendents of private estates to whom we have listened this morning. (Laughter That is something that we do not want to lose sight of. That is something that lies, thank God, at the bottom of the heart of every woman who made her appeal here this morning. (Applause from the opposition.)

I have not the slightest doubt that all of the women who appeared here this morning are independent, so far as their worldly concerns are involved, and I have not the slightest doubt that they feel that they can meet any charge that anybody may make for these bulbs on account of the impending scarcity, but that the real feeling in their hearts is that it is a deprivation to womanhood, to poor womanhood, of an enjoyment as innocent and pure as the dew of heaven that they should always have. It is what they came here for, in my judgment. (Applause from the opposition.)

There is a phase of this question which I will touch on because I presume it will be reached sooner or later in this discussion. It relates to a statement showing the importance of our own exports of crude foodstuffs according to the last report of the Department of Commerce. The export of crude foodstuffs which amounted to 203,000,000 in 1923-1924 totaled 483,000,000 in the





year just closed. The proportion of crude foodstuffs to the total value of all exports was raised from 4.8 per cent to 10.1 per cent. I may say on this subject, that many, if not all, of these foodstuffs of ours are likewise subject to foreign embargo upon grounds as sound as those advanced against these bulb importations. This argument may possibly be better addressed to the Secretary in person than to this audience, but I wish them to understand what is moving in my mind and in the minds of others and which will move undoubtedly to some extent the Secretary of Agriculture. We are subject. I say, to embargo, in my humble judgment, and I think that is fortified by the signs that are portending, upon many of our greatest and most important exports. We cannot expect the friendly interest of the foreign purchaser in our exports if we refuse to buy from him for an insufficient reason. We are not loved abroad to such an extent as makes that affection oppressive to us, at any rate. Everybody owes us money, almost, although I think Holland does not. The debtor was ~~never~~ very deeply enamored of his creditor, and if we are interfering with the debtor's revenue by which he hopes to pay some part of his obligation to us, we are not making the situation any nicer. An embargo improvidently laid down may start a trade war in which our agriculturists may be the chief sufferers. As an example of infestation of American exports I shall read in a moment from the report of Dr. Brick of the Section of



Plant Protection, Hamburg, Station, Germany, for the seasons 1911-1912 and 1912-1913.

I have here a copy of a letter addressed to Secretary Jardine which I wish to read for the benefit of the citizens of my state, which is an empire in itself, and the most glorious star in the whole constellation. This letter is also for the benefit of those from Washington, Oregon, Idaho, Montana, New York, and other states. This letter which is signed by the Northwest Apple Growers' Protective Association and bears the date of November 7, 1925, is as follows:

"The hearing on Quarantine #37 to be held by the Federal Horticultural Board on November 16th, to reconsider the Narcissus Embargo, is of great interest to the Apple Growers of the Pacific Northwest.

"The apple growers are convinced that the policy of the Federal Horticultural Board, as regards quarantine #37 has a very important bearing on the export market of apples. In order for the Northwestern apple growers to operate at a profit they need this export market. Europe buys about one-fifth of the commercial apple crop raised in the United States and of that one-fifth the United Kingdom takes about eighty per cent."

That is pertinent here, because England on its Scilly Islands grows bulbs quite extensively. I have no doubt that the commercial





attache of Great Britain has undoubtedly ~~not~~ attested his presence by signing one of the registration cards, as has the Holland government, and the French government are represented here also.

"Even with the export of such a substantial part of our apple crop the apple growers have suffered severely from over-production. This is especially true of the years 1922 and 1923 when both the East and West had a maximum crop at the same time. The cost of production in 1922 was high, about \$1.10 a box, the crop was large and the market price was only around \$1.00 per box. In 1923 conditions were even worse. While the production cost was still approximately \$1.10 per box the yield was very much larger than the preceding year and in consequence the market price dropped to an average of only seventy-seven cents per box.

"From these figures it is apparent what would have happened to the market price if it had not been for an increasing export trade. In 1924, with production costs normal or about \$1.00 per box, and a smaller crop than in either 1922 or 1923 and a larger export, the price jumped up to \$1.40 per box which gave the growers a profit. For the Western growers it should be pointed out that their exports in each of these years increased considerably.

"The apple growers have taken notice of statements made by the Controller and Assistant Controller of Horticulture for Great Britain, from which statements the apple growers have



drawn the conclusion that Great Britain will place an embargo on apples from the United States unless the Federal Horticultural Board changes its present policy of 'protection by embargoes' to a policy of 'protection by a system of mutual inspection

"One of the largest, if not the largest, apple growers and exporters in the State of Washington, while in London last July called upon the Department of Agriculture and inquired of the Assistant Controller of Horticulture, Mr. Taylor, if there existed any serious danger of an embargo by Great Britain on apples from the United States. Mr. Taylor stated that it must be clear to any open minded individual, familiar with the history of plant quarantine regulations, that an embargo by Great Britain on apples from the United States will be the logical and unavoidable result of the present situation. Mr. Taylor stated further, that ten years ago an embargo on apples from the United States could not have been thought of, but that at present Great Britain could manage very well without apples from the United States, for in the past ten years domestic fruit growing had greatly developed, especially in the southern part of England and there were large quantities of apples being placed on the British market from Canada, Australia, New Zealand, South Africa and even from the Argentine. He further stated that the present importations from the United States could be readily replaced





from other countries which have no embargoes on British horticultural products. Mr. Taylor stated further that all incoming shipments of apples from the United States were being thoroughly inspected by his Department and that insects and diseases new to Great Britain, which constituted a menace to the British plant industry were being found. That this policy of thorough inspection would be continued for some time, and their findings incorporated in a report. That from this report the facts could be fully ascertained and then the subject would be taken up with the proper officials in Washington.

"It is hardly necessary to emphasize the fact that we are very anxious to retain our present export markets for the surplus production of our orchards. Apple growers have more than a thousand dollars invested in their business for every one dollar invested by domestic bulb growers. We feel that a large, fully developed, industry representing hundreds of millions of dollars expended in its creation and maintenance should not be exposed to grave dangers for the benefit of an infant bulb industry."

Now, I have taken a few statistics from the only scientific and authoritative publication that I have been able to get hold of, with reference to the infestation of our apples which reach Europe, and I have the report for the years 1912 and 1913, and these were made by the German government, before Ger-





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many got into difficulties with the rest of creation; and after these years she was engaged in other work, neglecting the gathering of statistics on apples. This is a report of infestation of American apples and reads as follows:

"REPORT ON INFESTATION OF AMERICAN APPLES

By

Government Botanical Institution  
Section of Plant Protection  
Hamburg Station, Germany, by  
Dr. C. Brick for Season 1911-1912

From Official Publication

"Imported from the United States to Germany from Eastern and Middle States:

Apples in Barrels	117,049
Apples in Boxes	9,634
Pears in Barrels	509
Pears in Boxes	1,128
Other fruit in Boxes	<u>6</u>
TOTAL PACKAGES	128,326

Of these 7394 Barrels and 483 Boxes or 7877 packages proved to be infected with San Jose Scale.//

Now, that was not named after the town from which Mr. Free comes, but it has that name. It also has the name *aspidiotis perniciosus* Comst.

"From Western States 75,743 packages were imported of



which 8 Barrels and 1155 Boxes were similarly infected.

"The report also mentions the presence of the following other parasites:

*Aspidiotus ancylus* Putn.

" *Forbesi*

" *rapax* Comst.

*Chionaspis furfurea*.

*Lepidosaphes ulmi*

*Aspidiotus How\_ardi*

" *Uvae*

*Pseudococcus (Dactylopius) spec.*

*Schizoneura*

different Aphids.

"These parasites came from the following states:

New York, Virginia, Idaho, Washington, Oregon, California, Wisconsin, Maine, Michigan, Colorado.

"The following fungi were also found in those shipments:

*Fusicadium dendriticum* (Wallr)

*Leptothyrium pomi* Sacc.

*Roestelia pirata* Thaxt.

*Vermicularia spec.*

"The report of the same station for the season 1912-1913 shows importations:





"From Eastern and Middle States 214,309 packages, of which 13,804 barrels and 4,554 boxes or a total of 18,158 packages were infected with San Jose Scale.

"From Western States 264,836 packages, of which 22,720 were similarly infected.

"The parasites mentioned are:

*Aspidiotus perniciosus.*

" *ancylus.*

" *Forbesi*

" *Rapax.*

" *Howardi.*

*Chionaspis furfurea*

*Lepidosaphes ulmi*

*Pseudococcus species.*

*Musciadium pomi.*

*Leptothyrium pomi.*

*Roestelia pirata."*

It may be claimed that this and other statements are extraneous and outside the issue, but we believe otherwise. We believe that these considerations should be seriously weighed by the Secretary before making his decision in this case. The Department is no stranger to the weight of economic and commercial questions arising out of the administration of the Plant Quar-



tine Act.

It may be mentioned for instance that the banana trade is of great economic importance to the United States, and that they are a valuable and almost necessary food product, but it must be admitted that they come from the forbidden sections of the globe and that they bring with them insect pests of various kinds. Indeed there is no good reason to believe that the stem of the banana bunch and banana peels are not as friendly hosts to various insects as are the bulbs of Narcissus. The bananas grow in tropical forested areas and certainly must be subject to infestation from the dangerous plants surrounding them. It should be assumed that there are dangerous plants in this environment, for all plant stocks are forbidden and so are orchids which grow only in hot houses.

At this stage of the investigation by myself something occurred to me which I concluded to put down for the reflection of a good many Americans. It is as follows:

"And why beholdest thou the mote that is in thy brother's eye, but considerest not the beam that is in thine own eye?

"Or how wilt thou say to thy brother, Let me pull out the mote out of thine eye; and, behold, a beam is in thine own eye?

"Thou hypocrite, first cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote



out of thy brother's eye."

I want to say in all seriousness, Mr. Chairman, and members of this audience, that this argument is advanced with a profound conviction that it is of great importance. There are <sup>no</sup> persons standing here and asking that this embargo be lifted who would see harm through that action come to the United States. Not at all. It seems to me that the conclusion is irresistible that the ground is not found within the four corners of the Act because there is no question of the infestation of practically all parts of the United States with the pests that are named, whether they came through this importation or came through the importation of ten thousand other things that have come in for the last hundred years or whether they are native to the United States. Now, they have done in this one hundred years no economic harm of any consequence to anything in the United States that we know of. By good husbandry, care, attention, and scientific investigation it is kept to a minimum in the country which we claim is its origin. It is said that we will shut them out and we will fill the vacancy with a product of our own country. There is no product of any bulb in our country that is not the descendant of a bulb that came from abroad. The map, which we have all shown, shows that the infestation is here. The report of Mr. Weigel shows that it is here and serious in percentage in some places





among these bulbs. If that be true, then the pest is here and it is not subject to embargo because the Act says it must be new and not widely distributed, and if the pest is not from the domestic supply then there is no harm in its coming in because they may have been infested, and if they came in free, then those coming in in the future will be free too. You may take either horn of the dilemma, but that is the answer to this proposition. I have a clipping showing the anxiety of the Dutch Government published on November 15 and a clipping from the Times of November 8, containing a letter from Senator Capper of Kansas, concerning our foreign trade and our export of foodstuffs and the necessity of maintaining those exports and the difficulty that we are having and the envy that we have engendered, and so forth.

"European business men and their Governments are alarmed by the extent of American competition, and already a tremendous struggle is being waged in the markets of the Old World, having as its ultimate object the curbing, nay, the virtual exclusion, of this tide of American agricultural and industrial products. Another world war is already in progress, directly affecting every American farmer and wage earner. We are in the midst of a commercial conflict that dwarfs any previous trade rivalry the world has ever seen. In this conflict the United States faces the concerted attack of virtually all European nations.



"During my tour of France, England, Germany, Austria, Italy, Czechoslovakia, Yugoslavia, Holland, Switzerland and Belgium, I learned from our own trade representatives and from the business men and political leaders of those countries that the enormous growth of America's foreign trade is looked upon as a menace to be destroyed in any way possible. By many European business men we are believed to have taken advantage of the war to ~~as~~urp 'the place in the sun' formerly occupied by Germany at the height of her industrial supremacy.

"If it is borne in mind that in the first eight months of this year our sales abroad exceeded those of last year by \$389,000,000 it will be understood why the nations of Europe are filled with alarm and rapidly are adopting what might be termed 'war measures' to combat the rising flood of American products. In the single month of August, 1925, our exports amount to \$383,000,000 as compared with \$188,000,000 in August of the pre-war year 1913.

"The American farmer is as deeply concerned in this struggle as the American wage-earner and factory owner, for unless we can continue to find a market abroad for our surplus products of all kinds we shall have glutted markets at home, resulting, of course, in depressed prices, widespread unemployment and general shrinkage of property values."





"If American industrial plants are to continue at their full employment capacity, and if profitable markets are to be maintained for the surplus products of American farms, thus maintaining the price of crops sold in this country, we shall have to recognize the immediate need for the development of our cooperative marketing plans, both at home and abroad.

"The Department of Commerce, under the leadership of Secretary Hoover and acting through the Bureau of Foreign and Domestic Commerce, in charge of Dr. Julius Klein, and the Department of Agriculture, under the leadership of Secretary Jardine, are accomplishing wonders in keeping American manufacturers and farm-marketing organizations in touch with foreign trade conditions and opportunities."

That is why I say that Secretary Jardine is going to give this the best that is in him, and therefore, I want the record to be rather full on both sides. I want to offer all of this to the reporter for the record.

(The matter just referred to was quoted above.)

To our mind and in view of all that has been said with reference to the distribution of the pest and in view of all that is contained in the reports of this Department which have been accepted and which will be <sup>offered for</sup> ~~on~~ the record and which we will not read because of lack of time and desire to get through promptly, we feel



that there is no reason for the existence of exclusion except such a reason as should properly be presented to the Ways and Means Committee of the House of Representatives, and the Tariff Commission. That committee on Ways and Means has passed upon this phase of the question to the extent of fixing a tariff tax in its last bill of .5 per thousand on Paperwhites and .6 per thousand on Dutch bulbs. This tax is said to be equal to 40 or 50 per cent of the cost of Paperwhites in France. To lay an embargo for the benefit of American producers is an absolute perversion of the spirit of the act and is the assumption of legislative functions, and it would seem that this is entirely manifest in Department Circular of December 22, 1922 (which read).

It seems clearly apparent that so far as the bulbs in question are concerned, the policy of the Board is to instantly destroy the commerce that has existed for a hundred years in this commodity, upon the ground that foreign bulbs are afflicted with certain pests, and to build up an American bulb industry to fill the demand with an already similarly infested stock. And if the American stock be not infested, then it is proof conclusive that the alleged pests are harmless to American horticulture.

The whole world except the United States is not a horticultural post-house, and we find no warrant in the law to blanket quarantine the globe, as apparently has been done when the Depart-





ment places its interdiction upon Europe, Asia, Africa, Central and South America. The Commissioner of Immigration has as much warrant to shut out all travel to the United States, because in all countries some infectious disease is found among its inhabitants.

The function of the Department is to control pests and diseases, not business, but it has trespassed far into the business field by attempting to develop and enforce policies by means of embargo not contemplated by the law, and against this we respectfully protest.

The F. H. B. is properly concerned solely with the questions of disease and infestation of bulbs, plants, and seeds, but the Government of the United States, the Department of Agriculture and its able Secretary, have a far wider duty and responsibility in the premises. They must give consideration to the extent and hazard of such disease and infestation, because both are ever present to some degree in all importations and exportations of every kind and character.

I believe the gypsy moth came over in somebody's pocket and was released by a professor at Harvard, somewhere in a laboratory. You can't keep them out by embargoes. They must take into the equation and give consideration also to the general foreign trade of the United States in foodstuffs of all kinds, and





must take thought of a thousand collateral issues and matters far beyond the function and jurisdiction of technical scientists, whose honest zeal may prejudice, destroy, or injure the agricultural welfare of the United States to an extent a million times greater than can ensue upon the occasional importation of pests already established and widely prevalent within its boundaries.

Despotic or irrational exercises of power under the Act will necessarily irritate and aggravate an already not too friendly disposition overseas, and may perhaps promote similar embargo, reprisal or retaliation upon grounds as sound as those here advanced upon American exportation to the immeasurable damage of our commerce and our producers from the soil.

The protestants here are all animated by the same high purpose which always dictates the action of the Secretary of this Department. We are as deeply interested in the prevention of plant disease and insect infestation as are any other citizens of our country. We ask only for reasonable, rational administration of the Plant Quarantine Act as to bulb importations.

We feel that we have shown that no harm can come to the agricultural or horticultural interests of the United States by the continuation of this importation as it has existed for a hundred years. We have shown that the pests specified have long prevailed in the United States and are wide spread throughout the



country, and also as matter of truth and matter of fact, be they native or be they foreign, in the general pest equation they are minor. We feel that the administration of the Act should be in accord with its spirit and intent and should not be perverted into the equivalent of a tariff act.

All horticulturists interested in the protection of their industry in this direction are in the wrong forum when they appeal to the Department of Agriculture. Their arguments should be addressed to the Congress of the United States, which alone possesses such power. It has exercised this power in recent legislation and is ever open to further petition for increased rates.

I have made references to infestation of apples. I have said nothing with respect to other exportations from the glorious state, although apples is of minor consideration there. We grow more raisins than anybody on earth and send them to more places on earth than Spain ever dreamed of. Prunes, apricots and other things that are grown in large quantities are exported by the State of California. We have a few pests of our own and we depend on those markets for our success and for our fortune. Now, I have excepted from the report of 1922. I am very nearly through, Mr. Secretary. I have a statement made by Dr. van Slogteren, who was here at the conference in 1922 and who is here now. Rather than to put him upon the stand at this time I wish to read what he says





here, and I wish it understood that he is subject to such cross examination from any one, as to the accuracy or as to any interpretation it may be desired to place upon his statement of that time as any one here may wish to indulge in. He has gone over this and says it then was correct and that it still continues to be correct. I suppose it is conceded by every one that Professor van Slogteren is a thoroughly qualified scientist and phytopathologist. He stated then:

"The Dutch bulb growers offer the United States a product which has been grown scientifically, under expert care and supervision of the Netherlands Phytopathologists. The product is as free from plant diseases and insects as it is humanly possible to produce. It equals in cleanliness any agricultural products which the United States exports to Holland.

"I do not wish to say that you will never find a soft bulb in a shipment, but that condition need not be due to a disease of the bulbs, just as little as the decaying process in a bruised apple is necessarily due to a disease of the apple.

"It is difficult to picture to you here, how free from disease the Bulb stocks are in Holland. To get a full appreciation of this situation one should visit Holland and make personal observations, but I can tell you that I can show you many stocks of 500,000 and more Narcissus and Hyacinths of one variety in which



not a single diseased plant can be found.

"First of all a profitable cultivation is only possible if the stocks are kept scrupulously clean and free from disease and this is for our bulb growing industry strictly necessary, before we aim at supplying a healthy product to the foreign buyer.

"In order to continue to produce clean bulbs the stocks must be kept in a healthy state, so that the increase will be as prolific as possible and of strong vitality

"Only such a condition can promise a final profit to the growers, as a very small percentage of the diseased plants is sufficient to take away the chance of profit.

"The suppression of the few bulb diseases has been accomplished in a manner which I shall describe with a few words.

"Take the eelworm disease about which you have heard from time to time.

"In the Spring highly trained specialists go through the stocks looking for any infected plant which may appear. On sunny days these men are armed with umbrellas to obtain a neutral light on the plants before them. If the specialists find a suspected plant he lifts it out of the ground with a large round borer which takes along the soil about the plant for a diameter of 6 to 8 inches.

"The specialist places a marking stick near the spot where



the plant has been taken out. The plant is examined by cutting the bulb open to ascertain whether the same is sound or attacked by disease. If in the latter condition a gang of working men is directed to the spot where this particular bulb has been found. They scoup out the surrounding bulbs and soil for a width of from one to two square feet, which soil is then carefully removed to a place where the parasites can not do any harm. This method makes both the soil and the stocks free from eelworm. To further combat the spread of this parasite the field in which a diseased plant has been found is turned to a depth of 2 to 3 feet in the Fall and the planting stock of a variety in which symptoms of the disease have been discovered is subjected to a treatment in hot water which is so effective that not a single diseased plant can be found the following Spring.

"I brought with me various photographs showing details of these combative methods.

"All these things go to show with what painstaking care the elimination of diseases in the bulb cultures takes place and our efforts have been crowned with such a success that in the large majority of stocks these methods need not be applied any more. The inspection is continued as a preventive measure but more than 99% of the stocks are as a whole now absolutely free from eelworm. The remaining one per cent of stocks which may be affected show





the disease in a sporadic manner. A visit of any scientist will bear out the truth of this statement.

"As an evidence of the good results obtained I submit photographs of very large stocks of bulbs of which I can personally guarantee you that not a single diseased bulb can be found in them. The owner of a stock of bulbs of several millions recently offered ten dollars apiece for any diseased bulb that could be found in his stocks. Where I can offer you a scientifically verifiable guarantee of the absolute purity of such large stocks, it is difficult to believe that there are arguments which would justify the supposition that import restrictions should be placed on any whole class of bulbs I speak of. These bulb stocks are shipped from Holland entirely free from roots, topgrowth and soil. They are a thoroughly clean product and I request respectfully that all dry bulbs of all classes be permitted free entry into the United States, the same as they are allowed free entry into Holland."

wish

I also refer the Secretary in his consideration of this question to the remarks made at the 1922 hearing, in so far as they relate to bulbs, by Charles Pynaert, President Horticultural Syndicate of Belgium; Hon. L. G. Lobjoit, Controller of Horticulture, British Ministry of Agriculture, and Dr. van Poteren, Chief of Netherlands Phytopathological Service.

I also wish to introduce the following supplemental state--



ment by Dr. van Slogteren and which reads as follows:

"BRIEF

on

The Netherlands proposition made at the  
hearing before the Honorable, the Secretary  
of Agriculture at Washington, D. C.

(the Assistant Secretary presiding)

and the Federal Horticultural Board

on November 16th and 17th, 1925

filed and made a part of the original record

by

E. van Slogteren, Ph. D.

Scientific adviser of the Netherlands Govern-  
ment,

Professor of Plant Pathology at the University  
of Wageningen.

"A R G U M E N T

"The Netherlands Government takes it for granted that it is just as impossible to put a complete stop to the international exchange of plants and plant products as it is impossible to stop commerce between nations generally. Of course, we recognize that





national protection is a duty which devolves upon each nation, still we can not overlook the fact that this protection must be kept within reasonable limits, as was expressed in a motion which was unanimously adopted at the International Phytopathological Congress held in June 1923, which resolution reads as follows:

"The representatives of all nations, assembled at the International Phytopathological Conference June 25-30, 1923, desire to declare themselves as in full agreement with the essentials of international trade and commerce in living plants and plant products, namely, reasonable freedom from all insect pests and plant diseases of all kind of materials imported into, or exported from, any country."

"Realizing these principles, we in the Netherlands have used our best efforts to meet every reasonable demand which could be made to meet these requirements and we dare say that the Narcissi bulbs, which are now exported from our country to the United States, are as clean a product as is imported from any place in the world. It is true that in the Narcissi culture we have to combat certain parasites, but these same parasites are likewise occurring in the United States of America, and so far no scientific proof has been produced showing that the parasites, specialized on the Narcissi bulbs, have done any material damage to any of the American crops.

"Yet, it is not only for the purpose of protecting our exports



trade that we pay such close attention to the checking of diseases in the bulb fields, but our own interests demand that we check these pests to the minimum, for only in that way can we successfully grow bulbs from an economic standpoint. The result of our efforts is that at the present time not 1/10 of one per cent of the bulbs in the Netherlands are adversely affected by one of the three diseases mentioned as a danger for the American crops.

"We still regret that the Chairman of the Federal Horticulture Board, Dr. Marlatt, could not see his way clear to visit the bulb fields in the Netherlands during his recent trip, for it would have been easy for him to ascertain by personal observation the correctness of my statements. If Dr. Marlatt would have accepted our invitation, he would have come to the same conclusions as so many scientific investigators whom I had the pleasure of showing our fields and who unanimously declared themselves to be astonished by the good health conditions of our crops.

"The Netherlands Phytopathologists always extend a hearty welcome to all scientific investigators or practical horticulturists who desire to visit the bulb regions, and I therefore express the hope that in the near future those gentlemen who are interested in this matter will make a visit to our fields, where I can assure them they will be more than welcome to make a full and exhaustive examination.





The foregoing statements may be construed by some as

being at variance with the results of the investigations held at the places of entry and which are presumed to indicate a far larger percentage of infestation than you could reasonably expect to exist from what I have said. However, this apparent inconsistency is at least in part easily explained. Bulbs, like all other horticultural products, are largely influenced by and subject to climatic conditions, and this year the bulb fields of Holland have been subjected to various influences of the climate. These influences were largely brought about by some unusual hot days we had last summer, the result being that the resistance power of the bulbs against physiological influences was largely reduced. If such bulbs, suffering from such lower average of resistance, are packed in cases and subjected to the vicissitudes of ocean shipment, then as a matter of course a great many will decay and the rotting process will bring forth fungi and other saprophytic scavengers which eventually will be found at the place of debarkation. We in the Netherlands have found the same condition to exist in American fruits shipped overseas, but it would be erroneous to therefore believe that agencies which bring about and follow decomposition could be placed on the same line with parasites which attack otherwise healthy crops.

"It should be remembered that in the great family of bulbs





some varieties have far more resistance power than others. Those that show the least resistance power, for instance, Bicolor Victoria, Bicolor Horsfieldi, Madame De Graaff, Henry Irving, and Glory of Leiden, may arrive in the United States, when weather and shipping conditions have been unfavorable, in a bad condition, showing a rather large percentage of decay, although these bulbs were shipped in an absolutely clean condition from the country of their origin. Other varieties, however, like King Alfred, Emperor, Sir Watkin, Double Von Slon, Golden Spur, and Empress, have far more resistance power and show in that respect the same qualities as the French Paper Whites, and will arrive in very much better condition, showing a much smaller percentage of decay.

"Regarding the higher percentage of infestation mentioned in the reports of this season's inspection at the American ports of entry, I respectfully submit that the figures mentioned therein do not in any way correctly reflect our field conditions. An inspection of so small a percentage of samples taken at random allows too much the element of chance to enter to have full scientific value. The writer's own experience has taught him that it takes years of application and practice before one is capable of truly determining the health condition of a large shipment.

"Eight years of continuous, undivided attention to the bulb culture and its difficulties as forced the conclusion on the write



that the lesser bulb fly *Eumerus Strigatus* is a secondary parasite following another disease or a mechanical or physiological damage to the bulb. Dr. Griffith, of the American Department of Agriculture, has apparently reached the same conclusion. This applies especially to the softer varieties, which are especially given to easier and earlier rotting. On the other hand, this parasite is found much less on the so-called 'harder' varieties.

"The American inspection found a 26.82% of infestation by *Tylenchus Devastatrix*, and yet very little *Eumerus Strigatus* on the French Paper Whites, a hard bulb. With such infestation by *Tylenchus Devastatrix* these bulbs would have been almost completely destroyed by the lesser bulb fly had these varieties been of a softer nature.

"As to the three parasites which are so much under discussion, I beg to submit to your consideration the following data:

"1. *Tylenchus Devastatrix*. (Eelworm). This parasite is the cause of the well known eelworm-disease, and we have been able to learn this disease is not less prevalent and has been so for a number of years in the bulb fields of the United States than in those in Holland. The hot-water treatment of the bulbs has checked to such an extent this disease that we look forward with a great deal of confidence that in the near future this disease will be entirely eradicated. I therefore can say with confidence that as far as





Dutch bulb culture is concerned, this menace has become negligible.

"I have heard it stated that this Eelworm has passed from the Narcissi into the Alfalfa fields of the United States. I am constrained to say that after diligent search I have been unable to find a single scientific proof that this is really the case, but to the contrary, all indications point in a different direction.

"*Tylenchus Devastatrix* is widespread over the United States, and American scientific investigators have found this pest entirely independent from any bulb culture. It has been positively determined that amongst the Eelworms there are a great many definite biological strains, and I am convinced that one has to be very careful before stating that the Eelworm, belonging to one strain and infesting one kind of crop, transmits its activities to another crop. After extensive experimentation, I have been unable to transmit the Nematodes which are infesting American alfalfa fields to Dutch bulbs and per contra. Taking into consideration the comparative recent data that Narcissi have been infested by this pest and also taking into consideration the widespread prevalence of it in the United States, I am compelled to conclude that it is not reasonable to accept the theory that the imported bulbs were the carriers of this pest to the clover and alfalfa.



"It was gratifying for me to hear Dr. Cobb's statements at the meeting and to learn that his conclusions do not contradict the results of my investigations. My experiments, conducted during seven consecutive years, in which several different crops were continuously artificially infected with the Narcissus Nematode, have failed to evoke the Nematode disease characteristic of any of such crops.

"2. Merodon Equestris (Greater Bulb Fly) This pest is found in America as well as in Europe. The warm-water-treatment is as efficacious against this disease as it is against the Eelworm, and we have good reason to believe that this pest will also soon be exterminated. As I have stated before, even at the present time I have difficulty to find sufficient infected raw material to conduct my experiments. Furthermore, to the best of my knowledge serious damage to other crops, either in Europe or in the United States, caused by this insect, has never been established.

"3. Eumerus Strigatus (Lesser Bulbfly) This disease is exclusively a secondary one and is only found on bulbs which have already been damaged by other causes. Dr. David Griffith, of the Department of Agriculture of the United States, in his able pamphlet on the culture of Narcissi, published by the Department in 1924, emphatically bears out this statement. It is true that it





as been many times stated that this fly also attacks the field onion crop, but I can say conscientiously that notwithstanding extensive investigations, I have never been able to definitely identify the fly attacking the onion crop as being the same as the Lesser Narcissi fly, and I believe that other scientists have likewise failed to prove that even if there is no morphological difference, it is not another biological strain. Onions in the Netherlands are grown in close proximity to Narcissi bulbs, in fact, often on the same land as a rotation crop, and I have yet to ascertain one serious damage which was done to the onion crop.

"To obtain an abundance of control in the year 1917 I planted onions in my experimental fields which were previously for that purpose rather heavily infected with diseased bulbs, and notwithstanding this onion crop was grown for three successive years under conditions which did not only invite, but provoked infestation, I can now declare that neither *Tylenchus Devastatrix* nor *Eumerus Strigatus* appeared on the Onions.

"It is therefore evident that till now the scientific proof has not yet been given that one of these three parasites offer a serious menace to the successful culture of bulbs in the United States, and in addition it remains entirely unproven that they offer a menace to any other crop even if they appear





in a mild way in the bulb fields. This is furthermore shown rather conclusively by the fact that while these pests have been known in the United States for the last fifty years, still no serious damage was ever done by either of them.

"ADDITIONAL PRECAUTIONS SUGGESTED:

"We submit our cultures to the following scientific measures:

"First, practically all bulbs are carefully inspected before planting, and where there is only the slightest suspicion that they may be subject to infestation, they are promptly treated with the hot-water method. During the planting each bulb is inspected individually and during the growing and flowering period they are continually under observation. Wherever there is any sign of disease or even where there is only the slightest ground for suspicion that any of the bulbs may be diseased these bulbs are promptly eliminated. Only those bulbs are considered for export which belong to lots which have proven to be free from disease, and even then if after they have been taken up and dried and cured they are once more inspected by the Phytopathological Service, and only then a certificate of health is given.

"If desired, we are willing to offer additional precautions. For instance, we would be willing to make obligatory and enforce the rule that no bulbs be designated for export except those that



have been thoroughly treated by the hot-water-treatment before the last year's planting, and that these bulbs after planting will be subjected to an additional severe control while being in the fields. This applies especially to those bulbs which are used in the United States for forcing purposes. In addition, we would be willing to stipulate that all such bulbs which are to be used for planting purposes in America could be subjected immediately before their expedition to the hot-water-treatment. If required we will be willing to agree to have an American inspector or inspectors at the fields or elsewhere, the cost of this service to be paid by the Netherland exporters.

"The hotwater-treatment for all bulbs to be imported into the United States.

"A couple of years ago the undersigned made the statement that his experiments had not yet sufficiently advanced and been conducted long enough to guarantee after the hotwater treatment safe shipment overseas.

"Intensive investigations and experiments conducted continuously during the last three years have convinced me that this procedure, though expensive and laborious, can be followed if absolutely required, and that such process, when properly carried out and the necessary precautions taken, does not hurt the flowering capacity of the bulbs.





"If, therefore, the guaranties and precautions previously described are not considered sufficient, then we are willing to subject all our shipments of Narcissus-bulbs to the hot-water-treatment, by which all risks to the United States agricultural interests are eliminated.

"Permit me to sound in concluding a short personal note:

"The modern hotwater-treatment of bulbs is for the very greatest part a mental child of the undersigned, carefully fostered and brought to perfection. This treatment is now also successfully applied in the United States. The results of the scientific experiments of the undersigned are available not only to the growers and shippers in the Netherlands, but also to those abroad and the undersigned sincerely hopes that his efforts may be a contributing factor to the free exchange of treated bulbs between the countries of the world.

"Respectfully submitted,

"H. van Slogteren."

"NOT FOR TREATMENT"

Additional authorities submitted by Mr. Vogelsang:

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"Such material (bulbs) can be disinfected and safeguarded by the hot-water treatment." (Article by G. L. Marlatt, "Plants



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and Plant Pests." - Atlantic Monthly, June, 1925, p. 782.)

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"The most approved Dutch method of general treatment of narcissus bulbs for this fly ((*Merodon equestris* Fab.)) as well as for the nematode is known as the hot-water treatment."

"The hot-water treatment will kill the larvae of this insect ((*Lumerus strigatus* Fall.)) also." (U. S. Department of Agriculture - Department Bulletin No. 1270 - "The Production of Narcissus Bulbs" - October 11, 1924, p. 23.)

"Hot water will also kill the nematodes. Of course that will wet the seed ((clover seed)) and complicate the matter of handling the seed more or less. I have worked out what I believe to be a practical method of seed treatment which would be applied on a large scale." (Testimony of G. H. Godfrey, Bureau of Plant Industry, at Hearing to consider the advisability of quarantining the States of Oregon, California, Colorado, Washington, and Idaho, on account of injurious eelworms - Federal Horticultural Board, October 2, 1923, Transcript of Record, p. 14.)

Further details of the hot-water treatment are given by Mr. Godfrey at pages 11 and 12 of a mimeographed statement made a part of the record of the hearing of October 2, 1923, incorporated into this record, pages\_\_\_\_\_

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"It has been found by experiment that immersion of bulbs in hot water for one hour at a temperature of 110°F. is fatal to the larvae of narcissus flies. This investigation has been carried further and developed also in the direction of eelworm control. As the latter is the more serious pest and most difficult to kill, the treatment found efficient for its eradication may be adopted as a combined measure for both eelworm and narcissus fly larvae. This consists in soaking the bulbs at a temperature of 110°F. for 3 hours. No damage is done to the bulbs if they are in right condition for treatment, which is the case when they have ripened off in July, August, and September. A special apparatus for carrying out this treatment can now be purchased."

("Narcissus Flies" - Leaflet 286, Ministry of Agriculture and Fisheries. (England)) (Footnote 1 - J. K. Ramsbottom, Gardeners' Chronicle, May, 1920.)

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"It has been found that the eelworm is very susceptible to heat, and by steeping the bulbs in hot water at a fixed and constant temperature of 110°F. for three hours the eelworm and their eggs can be totally destroyed."

"The best method of controlling the pest ((*Merodon equestris*) is by adopting the treatment advised for the eelworm. If, however, the bulbs are solely affected with *Merodon*, a two-hour (or even





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one-hour) soaking at 110<sup>0</sup>F. is sufficient to kill the grubs."

"The grubs ((of the lesser fly, Eumerus)) are smaller than those of Merodon and a dozen or more may be found in one bulb. The same treatment as for Merodon is recommended."

"\* \* \* The same treatment advised for that pest (eelworm) will destroy the mites." ((Eucharis or bulb mite, Rhysoglyphus echinopus)) ("Narcissus Cultivation" - Leaflet 224, Ministry of Agriculture and Fisheries (England), pp. 8 and 9).

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See also "The Stem Eelworm (Tylenchus devastatrix)."  
Leaflet 46, Ministry of Agriculture and Fisheries (England) and  
Publication of Barford and Perkins, Ltd., Engineers, Peterborough,  
England, List No. 598, March 1925, entitled "Eelworm in Narcissus."



I have in my possession -- although I do not know that it is necessary to present it -- a copy of an advertisement published in a Holland newspaper last year in which they advertised for the presentation to the Bureau of Inspection of any diseased bulbs which might be found, so that they might be analyzed, evidently finding it very difficult to pick them up.

Now, I wish to introduce, without reading, extracts from the report of the public hearing that has already been referred to by Mr. McHutchison, on the so-called alfalfa quarantine embargo and also our analyses of these various pests and their conditions which are and actions/taken from authorities.

"EELWORM - (*Tylenchus dipsaci* (*devastatrix*))

"Not new to, and is widely distributed throughout the country.

"In Department of Agriculture S. R. A., F. H. B.76, issued November, 1923, p. . 118-120 is notice of a hearing to consider the advisability of quarantining Oregon, California, Colorado, Washington and Idaho on account of the eelworm, *Tylenchus dipsaci*, doing damages to alfalfa and clover. On October 2, 1923, the Federal Horticultural Board announced that no quarantine would be recommended.

"The hearing indicated that serious damage by this nematode or eelworm to alfalfa and clover has occurred only in the





Pacific Northwest in moist sections or under irrigation conditions, and there was no evidence to indicate that it was likely to become a menace under other conditions in the United States. The board, it is said, does not believe that products from the areas in which infestation is reported convey a greater risk to other portions of the country than do seeds or plants from foreign countries, the imports from which for the last hundred years have been undoubtedly bringing this pest into the United States.

'Failure of the pest to occasion injury in the United States as a whole is apparently due to the generally less favorable climatic conditions. Desirability of local control under State authority was indicated at the hearing for the protection of new irrigation projects.'

(1) "The outstanding points of this statement are

"(1) Damage has occurred only in moist sections or under irrigation conditions.

"(2) No evidence that the eelworm was likely to become a menace under other conditions in the United States.

"(3) No greater risk from clover, alfalfa and bulbs, from the infested territory than from plants from abroad which for the last 100 years have brought in the eelworm.

"This action of the Board was taken in 1923 after it had



determined to exclude foreign narcissus. A large portion of the American narcissi are grown in the States under consideration at that hearing.

"The Chairman of the Board, in the June, 1925 Atlantic Monthly (p. 732) has said that the eelworm has 'gained some foothold' in the 5 States mentioned and states that its introduction has 'apparently' been through the agency of the planting of imported bulbs and that it has spread to the clover fields.

"So long as its presence is established, the manner of introduction is immaterial, but in this connection see the statement of Dr. N. A. Cobb who reported the discovery of living *Tylenchus dipsaci* imported into the United States on alfalfa seed from South Africa. (Journal of Parasitology, December 1924- p. 102. Proceedings of the Helminthological Society of Washington.)

"L. P. Byars confirms the belief that foreign bulbs are not responsible for the introduction or distribution of the eelworm. In 1920 he said that this nematode in a living condition can be transported along with cleaned and uncleared clover seed, and that 'it is highly probable that the parasite has been introduced into and spread within this country by this means.' He added that spread in the irrigated regions 'no doubt' has been largely by water. (L. P. Byars, 'A Nematode





tode Disease of Red Clover and Strawberry in the Pacific Coast' - Phytopathology, Vol. 10, p. 91 - (published by Bureau of Plant Industry, Dept. of Agriculture.)

"Godfrey and McKay likewise report wide infestation in the Northwest on wild hosts and not only fail to place responsibility on imported bulbs, but suggest that the nematode is native to that region. They point out 'the abundance of the disease in remote places and spots,' and 'on the face of a perpendicular bluff.' They say that 'the evidence seems to point to the conclusion that the pest has been present on the wild plants for many years and that it is passing, in some localities at least, from the wild to cultivated strawberries. It is just as possible to conceive of the nematode as a native of that region as to conceive of the many native plants as having evolved there. It is equally plausible, however, to recognize the possibility of the pest having been introduced perhaps a hundred years ago when ships sailed from the northwestern ports laden with lumber and other products and came back sometimes with dirt ballast from European ports.'

"They also point out the stem nematode occurs definitely throughout practically the entire length of the Oregon coast line and inland in Willamette Valley at various points; and that it was later found 'in great abundance' at different points on Puget Sound, throughout the length of the Willamette Valley, and southward along





the coast as far as San Francisco. (The Stem Nematode *Tylenchus Dipsaci* on Wild Hosts in the Northwest by G. H. Godfrey, Pathologist, Bureau of Plant Industry, and A. B. McKay, Associate Pathologist, Oregon Agricultural Experiment Station - Dept. Agriculture Bulletin 1229 - March 1, 1924.)

"Godfrey reports also the finding of the 'widespread occurrence of the stem-nematode-infested false dandelion in the Pacific Coast States and the discovery of the same nematode in the true dandelion 'over a wide area in northeastern United States in July and September 1923.' He again states that 'it would appear to be very plausible to suppose that the parasite as well as the host plant (false dandelion), and that the parasite as well as the host plant have become simultaneously widespread.' He further states that this eelworm occurs in Western New York, the Province of Ontario, Canada, and at Boston, Mass. He states that in the false and true dandelion the eelworm has been observed to penetrate the seed and that 'this accounts definitely' for their wide distribution on these hosts for the wind carries the nematode-infested as well as the nematode-free seed. It is also stated that 'any disease that even suggests the possible lessening of the spread of either the false or true dandelion might be looked upon as a blessing rather than otherwise, except possibly in connection with the few fields of cultivated *Taraxacum* grown for food.' (G. H. God



frey, Pathologist, Bureau of Plant Industry - 'Dissemination of the Stem and Bulb Infesting Nematode, *Tylenchus Dipsaci*, in the Seeds of Certain Composites.' - Journal of Agricultural Research, Vol. 18, No. 5, p.p. 473-477 - May 3, 1924.)

"The Chairman of the Board, in the article in Atlantic Monthly (June, 1925, p. 782.) has quoted D. G. Milbrath, Pathologist of the California Department of Agriculture as having recently stated that if infested bulbs are not permitted to come into California, this nematode can still be eradicated from that State.

"Nothing would be said concerning this statement but for the publicity, and the value that has apparently been given to it by the Chairman. In view of the spread of the eelworm through wind-spread, clover and dandelion seed, irrigation water, hay, farm implements, animals, birds and man, can it be seriously argued that the exclusion of bulbs from the State of California will enable that State to eradicate the eelworm? To ask that question is to answer it. The Department of Agriculture has warned against the spread of the eelworm by such artificial means (Department Circular 297 - October, 1923, Yearbook, Dept. of Agriculture, 1914, p. 472 - N. A. Cobb.) has pointed out that 'infested hay \* \* is an important carrier of the disease' and has declined to quarantine California and the northwest although alfalfa and clover were admittedly seriously infested. (S. R. A.





F. H. B. 76, p. 118-120)

"Dr. Ernst A. Bessey reported his discovery of this nematode in Kansas in 1907, (5 years prior to the passage of the Plant Quarantine law) and the occurrence of eelworms apparently of the same species at Charleston, S. C. (Phytopathology, Vol. 4, p. 118-1914.) This was confirmed by Dr. Orton in Department Yearbook, 1907, p. 582.

"L. P. Byars reported this eelworm in hyacinths in the bulb garden of the Department of Agriculture at Bellingham, Washington. (Phytopathology, Vol. 4, p. 45-1914.)

"It has also been reported in Utah. (Anonymous, 1916. An Eelworm Disease in the Pacific Northwest. U. S. Dept. Agriculture, Office of Information - Mimeographed Circular; and Oregon Board of Horticulture, 17th Biennial Report, p. 181 - 'A Serious Nematode Disease of Strawberry and Clover in Oregon, by M. B. McKay, Associate Plant Pathologist.)

#### "EELWORMS - BIOLOGICAL STRAINS. -

"So much has been said concerning the introduction of eelworms by foreign bulbs, and the menace to alfalfa and clover by reason of this nematode that it seems necessary not only to direct attention to the fact that it has been introduced in clover and alfalfa seed, but that it is seriously questioned whether the same eelworm that attacks narcissus will damage e



clover or alfalfa.

"Ralph H. Smith has stated that 'the worms affecting red clover in Idaho do not under field conditions attack alfalfa, strawberries nor any of the cultivated crops which have been reported as hosts in foreign countries. Similar observations were early made in Europe. In explanation of this peculiarity of the eelworm, the Dutch scientist, Dr. Ritzema Bos, advanced the theory that the parasite after subsisting for a period on a particular kind of plant, finally becomes specialized in its ability to attack and thrive on the one plant and is not able to readily attack a plant of a different kind. Thus there appear to be several more or less distinct biological strains of the parasite, including the red clover strain, the alfalfa strain, the onion strain, the strawberry strain, the rye strain, and others. According to the biological strain theory, one might conclude that in the course of time the red clover eelworm in Idaho will gradually adapt itself to alfalfa and to many other crops that are attacked in different foreign countries. Preliminary field observations that have been made, however, do not support this apprehension.' (The Eelworm Disease of Red Clover, by Ralph H. Smith - University of Idaho Agricultural Experiment Station Bulletin No. 130, March, 1922, pages 6-7.)





"McKay also reports that 'some studies conducted on this nematode have suggested the existence of strains or races of the pest which become adapted to certain crops and do not readily attack other crops.' Although he expresses the opinion that it passes from strawberry to clover and vice versa, he states that 'there is need for more extended tests to determine whether the strain of the nematode affecting strawberry and clover in this State passes readily to all crops known to be infested by it in other places.' (Oregon Board of Horticulture, 17th Biennial Report, 1923, p.p. 181-182 - 'A Serious Nematode Disease of Strawberry and Clover in Oregon' by M. B. McKay, Associate Plant Pathologist.)

"Godfrey and McKay, in discussing the Stem Nematode on Wild Hosts in the Northwest, conclude as follows:

"The stem nematode *Tylenchus dipsaci* has been found rather abundantly in the Pacific Northwest on the wild strawberry (*Fragaria chiloensis*) and on the false dandelion (*Hypochaeris radicata*).

"The wild-strawberry strain of nemas occurs along the west coast of Oregon near the seashore, from Coos County to northern Tillamook County. The Hypochaeris strain was found from the southern part of Lincoln County, Oreg., to Long Beach, Wash., being almost universally present in western Oregon.

"Judging from natural occurrence, the two strains appear





to be entirely independent of one another. \* \* \*

"Several species of *Fragaria* are capable of becoming infested. The strawberry strain can be transmitted to red-clover seedlings. Attempts to transmit the *Hypochoeris* strain to other hosts have failed thus far." (U. S. Department of Agriculture Bulletin No. 1229, p. 8 - March 1, 1924.)

"This evidence further weakens the claim that the eelworm has spread from plantings of imported bulbs to the clover fields. (Atlantic Monthly, June, 1925, p. 782.)

"If, however, the biological strain theory which has much scientific support is entirely rejected the result is that the bulb plantings of California and the northwest, upon which it is proposed that future stocks of narcissus shall be drawn, are in a territory already infested with nematodes occurring on clover, alfalfa, cultivated strawberries, wild strawberries, dandelions and other wild hosts.

"English scientists have expressed similar convictions. Thus the English Ministry of Agriculture and Fisheries reports that 'certain of these plants, e. g., beans, have been recorded by other workers as being injured, but it is probable that they may be relatively immune from the race of eelworm usually found on red and white clovers, and there is therefore a choice of crops to replace the latter in rotation.' (The Stem Eelworm (*Tylenchus devastatrix*) - Leaflet No. 46 - 1921.)"



"DISTRIBUTION OF THE NEMATODE (Tylenchus dipsaci) IN THE UNITED STATES.

"EXTRACTS FROM REPORT OF HEARING TO CONSIDER ADVISABILITY OF QUARANTINING OREGON, CALIFORNIA, COLORADO, WASHINGTON AND IDAHO ON ACCOUNT OF NEMATODES - FEDERAL HORTICULTURAL BOARD OCTOBER 2, 1923 -

"Bellingham, Washington.

"Mr. Godfrey: 'The first notice we had in our office of the disease was its occurrence on hyacinth in a bulb garden at Bellingham, Wash. There it was clearly brought in in imported bulbs and quickly eradicated. All of the diseased bulbs were destroyed. The field where it occurred was put into other crops for two or three years and since then it apparently has not appeared at all.' (p. 5.)

"Watsonville, California.

"Mr. Godfrey: 'In the spring of 1923 specimens were received from Watsonville, Calif., which were clear cut cases of the stem nematode disease.' (p. 6)

"Ohio.

"Dr. Cobb reports the occurrence of the disease in Ohio. (p. 23.)

"New Jersey.

"The Chairman: 'We have a report from Mr. Weiss, Chief of the Bureau of Statistics and Inspection of New Jersey, stating 'I thought that you would be interested in knowing that this eel





worm has apparently been found in New Jersey in the stems of phlox. In view of the large importations of roots and bulbs from Holland in years past, it is my belief that it must be established in other eastern states." (p. 23.)

"Washington, Oregon, California, Colorado, Idaho.-

"Mr. Godfrey: 'As a result of the survey during the summer of 1923 we found it abundantly in the Yakima Valley, Wash. \* \* \* Thus far I have mentioned it on strawberries, clover and alfalfa. At the top of page 4 you will see mention of the occurrence at Canyon City, Colo., \* \* \*

"In narcissus the first case that came to my attention was on bulbs shipped in from Chicago, Ill. Last fall specimens were received at Washington for forcing purposes which were badly diseased. They came directly from Holland. This summer the disease was found at Salem, Portland, and Tillamook, Ore., Eureka, Calif., and very slightly at Benton Harbor, Mich.

" \* \* \* Dealing specifically with the disease in clover, its distribution as referred to on page 5 of the outline is Redmond, Deschutes County, Ore., and Siltcoos, Lane County, Ore., which is a Pacific Coast County. The occurrence at these points is not in large commercial fields but in very small spots. At Enterprise, Wallowa County, Ore., there is a first evident outbreak of it this season which promises to develop as it has developed in Southern



Idaho. In Kenyon and Twin Falls counties, Idaho, the principal seed producing sections of Idaho, it is very general.' (p. 6)

"Eastern States."

"Dr. Kellerman: 'While reports of injury have come from the Western areas, apparently no injury so severe as to result in its being reported has occurred in any Eastern State. Mr. Godfrey's finding the disease on dandelion is another thing that seems peculiar. The disease must have been in the East for a long period of time to be established on a wild plant rather widely, but in that same area it is affecting the cultivated plants in comparatively small amount or not at all.' (p. 19.)

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"The Chairman: 'Presumably it has been arriving thus on many plants as well as bulbs and is distributed throughout the whole country.' (p. 22.)

"Dr. Cobb: 'That is very probable. It certainly would look that way.' (p. 22.)

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"The Chairman: '\* \* \* I still think climatic control seems to be fairly clearly indicated, especially in connection with the known unlimited importation of infested material into the country during the last quarter or half a century or more, and the abundant opportunity the insect apparently has had to have gotten



foothold throughout the United States. I don't think there is any question about its having had such opportunity. The only thing that keeps them back would be these two things. One is the possibility that the strains in the East have not been virulent enough or had enough originality to take other hosts and the other is climatic conditions, which have prevented it becoming harmful enough in the East to be recognized and noticed as a harmful factor.' (p.p. 25-26.)

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"The Chairman: ' \* \* \* That it is now in the East I very much question. The enormous movement of plants from Europe, and up to the past few years great masses of earth have been brought in with the plants, would seem to indicate that it is not new in the East. We have been bringing thousands of tons of European soil and bulbs to this eastern country. It has been going on for years in an increasing amount. That it is new in the East I can hardly believe.' (p. 33.)

"Distribution of Eelworm by Clover Seed, Hay, Implements, Man, Animals, Birds, Wind, Water, and Dust.-"

"Mr. Godfrey: 'I have given most of the space here to seed which is without doubt responsible for transfer from one locality to another of the disease. We have examined many lots of seed. Dr. Cobb looked over seed infested fields in Southern





Idaho and found living *Tylenchus dipsaci*. I have taken lots of these seeds and planted them in the greenhouse in Washington in well isolated localities and in 4 parts out of 24 there were diseased seedlings developed. That shows that in those parts either a mature adult female with eggs was present or a male and female were present. Infestation occurred and the typical disease developed.' (pp. 10-11.) \* \*

"Mr. Godfrey: 'That goes to show that the seed is certainly an important carrier of the disease.' (p. 12.) \* \* \*

"Mr. Godfrey: ' \* \* \* we have definite cases where the disease was established in a new section by using seed from a diseased section.' \* \* \* \*

"I believe they ship 20 million pounds of seed or more from Southern Idaho." (p. 14.)

"Doctor Cobb: 'Doctor Kellerman suggested that I should inform the conference on a new finding in connection with this matter. It is not anything startling. It is the occurrence of this nema alive on alfalfa seed imported from So. Africa, the seed being, according to Mr. Brown's belief, less than a year old. We have found this nema and others closely like it on seeds for many years back, foreign as well as domestic seed.

"The Chairman: 'Seed from Europe and other places?



"Dr. Cobb: 'Yes.'

"The Chairman: 'On sugar beet seed?'

"Dr. Cobb: Yes, So there is nothing remarkable about this except it is the first time it has happened from South Africa and a good deal of seed is being imported from there at the present time.(p. 21)

### "Miscellaneous Means of Distribution.

"Mr. Godfrey: (Referring to clover) 'Such diseased stems are largely responsible for the infestation of seed as it goes through the thrashing machine. I have listed the means by which disease is spread in clover. Irrigation water is clearly the most important of all. We find evidence of it right and left in the field. \* \* \* The farm implements in crossing a field will track parts of infested plants and nematodes throughout a field. If a man is very neighborly he may loan implements to a neighbor and transfer the disease. There is no question but what the man himself in irrigating with shovel and boots will carry muddy water and mud to other parts of his field. He may even jump over a neighbor's fence and talk to him. I have mentioned birds. In the West the Chinese pheasant is very abundant and the California quail. We have seen them in the field picking the alfalfa and running the irrigation ditch and then going over to other fields.





I have not actually killed the birds and examined them. I have examined chickens to the extent that I know they carry muddy water and mad.. In Southern Idaho there are often sand storms. Many of you have undoubtedly seen sand piled up on the roadways. The Canadian thistle is very abundant everywhere. The wind will carry dry parts of plants and perhaps nematodes.' (p. 10)

"Climatic Control.

"The Chairman: 'I still think climatic control seems to be fairly clearly indicated, especially in connection with the known unlimited importation of infested material into the country during the last quarter or half a century or more, and the abundant opportunity the insect apparently has had to have gotten foothold throughout the United States. I don't think there is any question about its having had such opportunity. The only thing that keeps them back would be these two things. One is the possibility that the strains in the East have not been virulent enough or ~~had~~ enough originality to take other hosts and the other is climatic conditions, which have prevented it becoming harmful enough in the East to be recognized and noticed as a harmful factor.' (pp.25-26.)

"The Chairman: 'I said at the beginning that the Quarantine action must necessarily depend on some restrictive distribution. We can not begin quarantining a section when the disease is probably there and confessedly is elsewhere. If we are not restrictin



the distribution of a particularly virulent strain I don't see any point in quarantining a section to protect another section when that other section confessedly has it in some form or very possibly has it. We don't put on quarantines for fun. They must have some practical and useful purpose. If we are led to believe that this worm is climatically controlled in the East and normally occurs here probably, especially as it had had opportunity, and has been distributed quite widely throughout the Whole United States, -- I would be very slow to consider quarantine action with all the factors that have been presented. There is the seed distribution, the bulb distribution, water and wind spread, and a lot of other factors.' (p. 27) \* \* \* \* \*

"The Chairman: 'Would you think it would be logical if we declared a quarantine or considered a quarantine even against the western products and left the door open to European products?'

"Mr. Pieters: 'Not at all.'

"The Chairman: 'In other words, to take action on this nematode with respect to the West we would be bound to close the ports of the East against all plants.' (p. 29)

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"DISTRIBUTION OF THE EELWORM (*Tylenchus dipsaci*) IN THE UNITED STATES

"THE STEM AND BULB INVADING NEMATODE, TYLENCHUS DIPSACI,  
IN THE PACIFIC COAST STATES.

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INTRODUCTION

"The Nature of the organism.

"Belongs to nematode, thread-worm group, a very large group, outnumbering possibly even the insects. Contains thousands of species of 'free-living forms,' animal, and plant parasites. Often called eel-worms.

"Of the plant parasites there are many. Root-knot nematode most important, stem and bulb nematode probably next. Besides these, many others attacking ornamental ferns, violets, strawberries, citrus, rice, cocoanuts, and many other crops, all different species.

"Life History.

*Tylenchus dipsaci* has simple life history, egg, larva, and adult; female adult may produce 200 eggs, so multiplication is rapid. They penetrate young, succulent parts of host plant. Food consists of living plant juice. Growth and development and some migration take place within tissues of the host. They leave a dying plant and go into the soil. Hardy to drying and to cold. Regain activity after months and possibly years in dry condition.





Moisture necessary for motion and for infection.

### "PLANTS SUBJECT TO ATTACK.

"Tylenchus dipsaci, known since 1851 as a plant parasite.

Has a wide range of hosts, over fifty. Most important economic hosts are as follows:

Onion	Broad bean	Potato
Oats	Garlic	Red clover
Barley	Wheat	Daisy
Turnip	Rye	Bachelor's button
Hyacinth	Hemp	Forget-me-not
Flax	Galtonia	Phlox
Narcissus	Alfalfa	Buttercup
English pea	Kidney bean	
Scylla	Buckwheat	and a number of other flowers and weeds.

### "IMPORTANCE IN OTHER COUNTRIES

<u>Crop</u>	<u>Country</u>	<u>History and economic importance</u>
Clover	England	Known since 1897 as cause of 'clover sickness.'
	Germany	One of many hosts known for years.
Hyacinth	Holland	Known as 'old disease,' since it was first bulb disease recognized.
Narcissus	England	Said to have caused loss of half-a-million dollars on Island of Guernsey. Directly and indirectly still causing much loss to bulb growers in many bulb growing districts.
	Holland	Recognized as a regular factor in bulb culture; some bulb farms a total loss until control measures adopted.
Onion	Spain and France	Recognized as disease known widely as 'Boixat.'



<u>Crop</u>	<u>Country</u>	<u>History and economic importance</u>
Bean	Algiers	Broad bean fields damaged to considerable extent; justifying investigation and publication of extensive paper by two Frenchmen.
Alfalfa	South Africa	Almost universally distributed; shortens the life of the crop to 4 or 5 years, necessitating frequent replantings.

"Dr. Cobb has had personal experience with the organism, I believe, in Australia.

#### "THE STEM AND BULB NEMATODE IN AMERICA

"Four hosts are of primary importance in the United States, These are bulbs, clover, alfalfa, and strawberries. Other hosts reported but never seriously affected. Table shows record of occurrence and later development on various hosts in America.

<u>Crop</u>	<u>Date first observed</u>	<u>Locality</u>	<u>Later development</u>
Rye	1907	Edgerton, Kan.	No further mention of its occurrence.
Hyacinth	1913	Bellingham, Wash.	In imported bulbs; eliminated by careful culture.
Strawberry	1915	Point Terrace, Ore.	Later found widely spread in this and other parts of western Oregon.
Clover	1915	Redmond, Ore.	No further report from this section.
"	1919	Twin Falls, Idaho	Abundant throughout clover seed producing sections of Twin Falls and Canyon Co., Idaho; also found near Yakima, Wash., and Provo, Utah.





<u>Crop</u>	<u>Date first observed</u>	<u>Locality</u>	<u>Later development</u>
Clover	1921	Siltcoos, Ore.	Not in commercial field.
Alfalfa	1921	Hermiston, Ore.	Increased rapidly in this section; abundant in 1923.
"	1923	Watsonville, Calif.	One field destroyed; survey showed other fields within three miles affected.
"	"	Yakima Valley, Wn.	Scattered through valley from Yakima to Kennewick; some fields serious, others new infections; many fields free. Absent around Pasco, and in Walla Walla section.
"	1923	Canyon City, Colo.	Reported as serious; extent of distribution not yet determined.
Narcissus	1922	Chicago, Ill.	Specimen sent in without data.
"	"	Washington,	Imported from Holland in Golden Spur; badly affected.
"	1923	Salem, Ore.	On bulbs brought in from Eureka, Calif.; approximately 25% affected, 5% badly; five thousand bulbs involved.
"	"	Portland, Ore.	10 to 25% on different lots of forcing stock originating in Holland and held for propagating; several hundred thousand bulbs involved.



<u>Crop</u>	<u>Date first observed</u>	<u>Locality</u>	<u>Later development</u>
Narcissus	1923	Tilamook, Ore.	On Chinese sacred lily from San Francisco; origin not traced; balance of narcissus free.
"	"	Eureka, Calif.	1 to 5% on old Dutch bulbs in the ground some years.
"	"	Benton Harbor, Mich.	Very slight injury on large plantation (several acres); said by propagators to have been gotten under control by cultural methods.

"The disease was not found at the Government Bulb Farm at Bellingham, at Lawler's near Tacoma, or at one other large farm near Tacoma, Wash. Survey incomplete.

#### "THE STEM NEMATODE IN CLOVER.

##### "Distribution:

Redmond, DeSchutes Co., Ore.	1907.	No later reports.
Siltcoos, Lane Co., Ore.	1921.	Not in commercial field.
Enterprise, Wallowa Co., Ore.	1923.	Promises development as in southern Idaho.
Canyon Co., Idaho	1919 on.	General
Twin Falls Co., Idaho	"	General
Yakima Valley, Wash.	"	Less abundant than Idaho.

##### "Losses:

"Extremely variable, from 0 to 90%, averaging perhaps 15%, in regions where infestation is indicated as 'general.' With an acreage of 50,000 this loss is important. Loss very considerable



to individual growers whose fields may be particularly hard hit.

Symptoms:

"The disease most evident in early spring, when thin spots appear in the field; many plants killed out, others barely showing life and may be scraped off the ground with the foot. Swollen sprouts, sickly color, sometimes crinkled leaves. As plants grow, swellings found higher up on the stems. Some stalks twisted and distorted, due to presence of nematodes within the pith, at base.

All swollen parts contain living eelworms in all stages of development.

"Manner of spread:

"Irrigation water; perhaps most important of all.  
Farm implements; much transfer on the farm by this means.  
Man and animals.  
Birds.  
Wind.  
Seed; responsible for transfer from one locality to another. Many examinations have shown the organisms present on the seed or in trash with the seed. Thoroughly cleaned seed not so likely to contain nematodes. Not found in DeKalb Co., Ill., where clover sown for years from Idaho grown seed.

"Control:

"Judicious rotations and cultural methods recommended by Dr. Pieters will keep the disease in check. Important, where the disease occurs not to attempt to grow a crop of seed a third season.

"Heat treatment for seed.

"Any measures to lessen spread through seed important. Prob-



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able that much of early infection in new fields due to seed transmission, Spread to new localities, e. g., new irrigation projects might be avoided. Heat is best means for killing the nematodes; dry heat, hot water, steam. Last perhaps most practicable. Five to ten seconds exposure to steam will kill nematodes. Seed will stand 20 to 30 seconds. Practicable to work out method for large scale application.

"Losses:

"Difficult to estimate losses in tangible figures; under favorable conditions, such as exist in most irrigation districts, life of field reduced to from 3 to 5 or 6 years, bringing about gradually reduced yield, lower quality hay, and need for replanting.

"Symptoms:

"Much as in clover. Much sprouting occurs under ground, therefore chances better for infection. Weakened yellowish sprouts, some of which ~~may~~ wilt and die, evident in early stage. Later most of plant dead, with only a few weak sprouts, easily broken off. Such weakened plants winterkill easily, Swellings grow up with stems, to foot or more above ground. Such may be cut with the hay.

"Manner of spread:

"Same as with clover.

"Birds, such as Chinese pheasant, often seen running through alfalfa and in ditches.

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"Hay an important factor in spread. Hay cars, with trash from baled hay may be diverted from Seattle or Portland to inland points, where they may be cleaned before packing with fruit, thus scattering infestation.

"Sheep pastured on diseased fields may carry it to other fields. Much evidence to support belief that sheep are important carriers.

"Irrigation water: Many infestations appear to be district-wide, owing to undoubted spread by irrigation water. Test showed 300 eelworms per gallon of water at lower edge of diseased field. Such water carried on from waste ditch to irrigation laterals lower down.

Control:

"Rotation more difficult than with clover.

- (1) Difficult to completely remove alfalfa; in one case under observation diseased plants were found two years after alfalfa was plowed, corn and wheat having been grown since.
- (2) Type of soil in some sections suitable only to alfalfa.





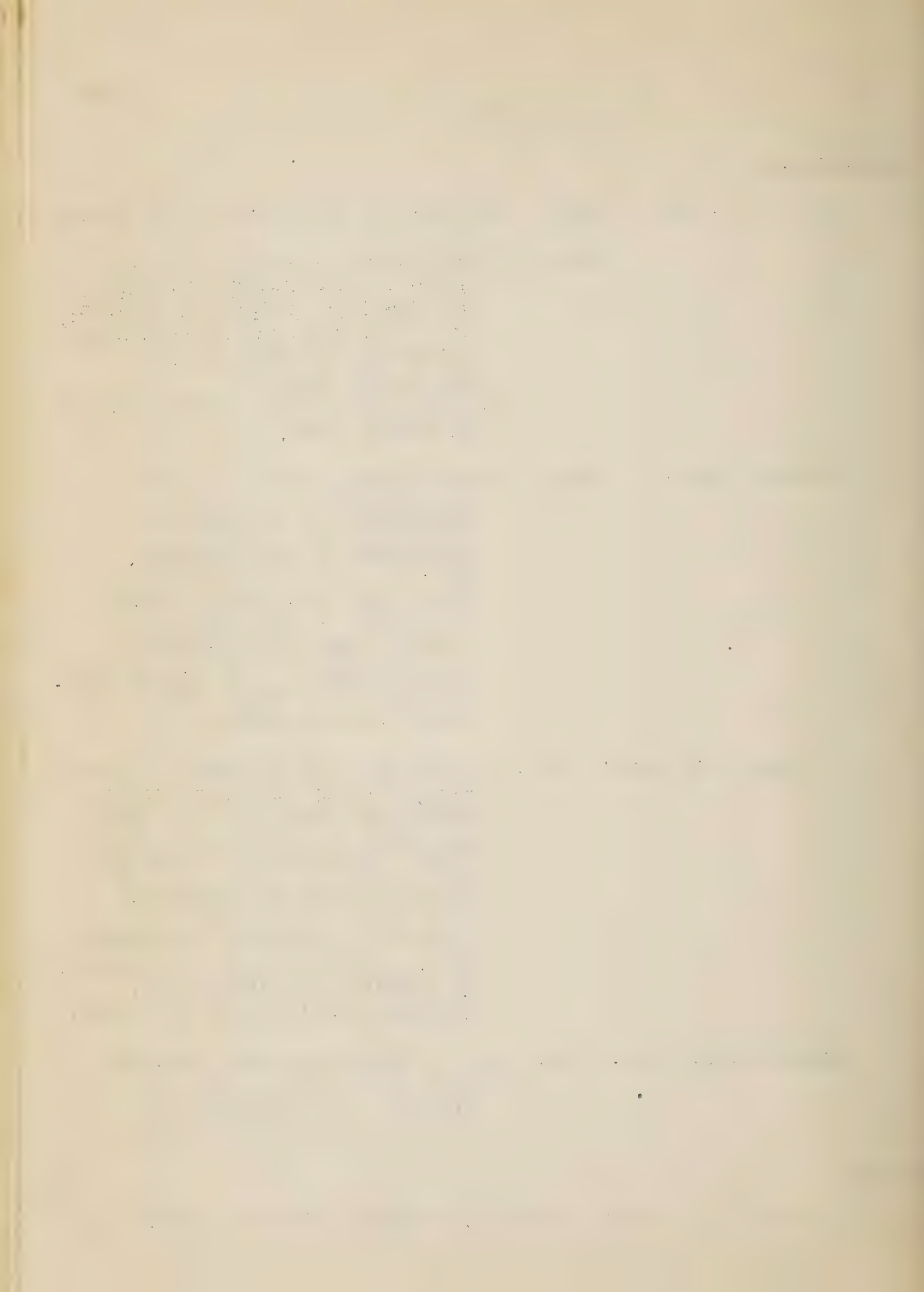
## "IN ALFALFA

Distribution:

- Hermiston, Ore. 1921. Appeared to be limited to 80 acres.
1923. Wider surveys showed it to be present practically throughout the Umatilla irrigation project, some old, some new infestations; evidences of active spread. Few fields free. Central and eastern border counties in Oregon free.
- Yakima, Wash. 1923. Hasty survey showed it to be present from region about Yakima all the way down to Kennewick, on the Columbia. Many new, many old infestations with practically total loss; many fields still producing, loss not noticeable to the grower. Many fields free. District about Pasco free; also Walla Walla district.
- Watsonville, Calif. 1923. Field of about 10 acres, 3 years old plowed up as unprofitable. Nematodes found on ditch banks and fence rows in nearly every plant. Neighboring fields affected; others to distance of 3 miles found affected. Alfalfa of secondary importance here. Probably will be adequately handled, by eradication, through activities of the State.
- Ganym City, Colo. 1923. Report, with specimens; disease said to be serious in some fields. No information as yet as to extent of spread.

Losses:

Difficult to estimate losses in tangible figures; under



favorable conditions, such as exist in most irrigation districts, life of field reduced to from 3 to 5 or 6 years, bringing about gradually reduced yield, lower quality hay, and need for replanting.

Symptoms:

Much as in clover. Much sprouting occurs under ground, therefore chances better for infection. Weakened yellowish sprouts, some of which may wilt and die, evident in early stage. Later most of plant dead, with only a few weak sprouts, easily broken off. Such weakened plants winterkill easily. Swellings grow up with stems, to foot or more above ground. Such may be cut with the hay.

Manner of spread:

Same as with clover.

Birds, such as Chinese pheasant, often seen running through alfalfa and in ditches.

Hay an important factor in spread. Hay cars, with trash from baled hay may be diverted from Seattle or Portland to inland points, where they may be cleaned before packing with fruit, thus scattering infestation.

Sheep pastured on diseased fields may carry it to other fields. Much evidence to support belief that sheep are important carriers.

Irrigation water: Many infestations appear to be district-wide, owing to undoubted spread by irrigation water. Test showed 300 eelworms per gallon of water at lower edge of diseased field. Such water carried on from waste ditch to irrigation laterals lower down.

THE [illegible] OF [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Control:

Rotation more difficult than with clover.

- (1) Difficult to completely remove alfalfa; in one case under observation diseased plants were found two years after alfalfa was plowed, corn and wheat having been grown since.
- (2) Type of soil in some sections suitable only to alfalfa.
- (3) Alfalfa normally grown 6 or more years continuously. More frequent plantings costly.

Eradication: (?)

Quarantine: (?)

## "IN BULBS

Distribution:

Hyacinth. 1913. Bellingham, Wash. Eradicated by cultural care.

Narcissus. 1922. Chicago, Ill. Could not be traced; possibly connected with occurrence at

Benton Harbor, Mich.

Apparently gotten under good control by careful cultural methods, rotations, etc. Diseased plants rogued out, together with soil immediately surrounding them; 20 or more acres involved.

1922. Washington, D. C. In lot of Golden Spur received from Speelman & Sons, Holland; origin-



1870

1871

1872

1873

1874

1875

1876

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1878

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1880

1881

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1883

1884

1885

ally infested bulbs, together with secondary infections in same flat; gave almost total loss in lot of 3000 bulbs. Used for experimental purposes.

Narcissus. 1923. Salem, Ore.

In lot of about five thousand bulbs obtained directly from Eureka, Calif., about 25% were slightly diseased; 5% showed advanced stages. Balance of farm of many thousand bulbs free from the disease.

Portland, Ore.

Several hundred thousand bulbs growing out of doors, showed from 10 to 25%, infestation; only a few, less than 1% bad. These bulbs, received for forcing, were removed from the greenhouse in the spring after flowering, and set out of doors, where they became well established. Disease found in plots set out 3, 2 and 1 year ago, and very small amount in this spring's lot.

Tillamook, Ore.

Small bulb farm found practically free from the disease one small spot of half a dozen bulbs of Chinese sacred lily showed severe infestation. These removed and spot treated with tub of boiling water.

Eureka, Calif.

Large bulb farm being abandoned; no recent importation very small amount of disease present.



Bulb garden at Bellingham free.

George Lawler, Tacoma, Washington, free.

One other near Tacoma, free.

Dozens of other bulb gardens in west and middle west not visited.

Refer to Doctor Griffiths.

#### "Losses:

Direct losses probably not very great, as yet, in America.

#### "Symptoms:

Swollen and distorted leaves, yellowish color, reduced vitality.

#### "Disease progressive:

1st season, mild lesions, swollen and yellow in leaves, easily determined by running the leaf through the fingers; next year, more leaves swollen and distorted, more general yellow color, flower stalk weak or not at all developed; third season, growth just above ground, with yellowish swollen leaves, or entirely gone. Infested bulbs when cut across show ring of yellowish to tan and brown, due to presence of eelworms within the scale.

#### "Seasonal development:

Leaf infections are primary. Organisms develop and multiply within the leaf. Toward end of growing season they migrate





down through the leaf into interior of bulbs, within certain scales. Lie dormant during resting stage of bulb.

Probably some activity and increase even there. With growth of bulb they penetrate to other scales and into ground, where they move to other plants which they infest. Others grow up with the bulb, causing distortion.

#### "Manner of spread:

Bodily movement from diseased plants to others in same field. Other mechanical means as with other crops.

Most important, transfer with the diseased bulbs, which carry infestation long distances, as from one country to another.

#### "Control:

Roguing, with removal of soil around a diseased plant, will help much in keeping disease in check.

Rotation seems to insure comparative freedom from the disease, if combined with removal of diseased plants as they appear.

Heat treatments of bulbs that are not too heavily infested are said to insure freedom from living nematodes in England and Holland.

Ramsbottom, England, recommends 110°F. for 3 hours.

Dutch pathologists recommend 110 to 113°F. for 1 hour.

for bulbs for propagating purposes. Do not commit

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are in agreement with the experimental facts.

The second part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, and that the properties of matter can be used to test the theory of the structure of the atom.

The third part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of light. It is shown that the theory of the structure of the atom can be used to explain the properties of light, and that the properties of light can be used to test the theory of the structure of the atom.

The fourth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter and light. It is shown that the theory of the structure of the atom can be used to explain the properties of matter and light, and that the properties of matter and light can be used to test the theory of the structure of the atom.

The fifth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter, light, and matter and light. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, light, and matter and light, and that the properties of matter, light, and matter and light can be used to test the theory of the structure of the atom.

The sixth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter, light, and matter and light. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, light, and matter and light, and that the properties of matter, light, and matter and light can be used to test the theory of the structure of the atom.

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themselves for flowering stock, which they say are  
not to be used for propagating and are therefore safe  
I find 113<sup>0</sup> actual contact with eelworms for

5 min. does not injure;  
10 min. " " " ;  
20 min. kills about 1/3;  
30 min. " most, but not all;  
60 min. " all.

Much work needed and under way to determine rate of penetration  
of heat into interior of bulbs, and effect of treatments of growth  
and flowering.

#### "OTHER STRAINS OF STEM NEMATODE IN AMERICA.

"Hypochaeris radicata, the false dandelion, 1922, found infested in  
western Oregon. Later found to be infested along the west  
coast, in Puget Sound region and south throughout Willamette  
Valley, and the California Coast region to San Francisco.

"Taraxacum officinale, true dandelion, 1923, found infested in west-  
ern New York, from Ithaca to Niagara Falls, in Ontario Province,  
Canada, and at Boston, Mass.

#### Distribution:

Seen to be wide for both.

#### Symptoms:

Typical of stem nematode infestations; swellings in

1. The first part of the paper is devoted to a general discussion of the problem.

2. In the second part, we shall consider the case of a single particle.

3. The third part is devoted to the case of a system of particles.

4. In the fourth part, we shall consider the case of a continuous medium.

5. The fifth part is devoted to the case of a system of continuous media.

6. In the sixth part, we shall consider the case of a system of particles and continuous media.

7. The seventh part is devoted to the case of a system of particles and continuous media.

8. In the eighth part, we shall consider the case of a system of particles and continuous media.

9. The ninth part is devoted to the case of a system of particles and continuous media.

10. In the tenth part, we shall consider the case of a system of particles and continuous media.

11. The eleventh part is devoted to the case of a system of particles and continuous media.

12. In the twelfth part, we shall consider the case of a system of particles and continuous media.

13. The thirteenth part is devoted to the case of a system of particles and continuous media.

14. In the fourteenth part, we shall consider the case of a system of particles and continuous media.

15. The fifteenth part is devoted to the case of a system of particles and continuous media.

16. In the sixteenth part, we shall consider the case of a system of particles and continuous media.

17. The seventeenth part is devoted to the case of a system of particles and continuous media.

18. In the eighteenth part, we shall consider the case of a system of particles and continuous media.

leaf blades and veins, often in midribs, causing distortion of leaves; abundant where severe in young leaves growing in crown. When conditions are favorable, enters developing flower head, growing up with it, and causing swellings in stem at base of flower head and in calyx.

Manner of spread:

The eelworms found to actually enter the seed, and to be thus definitely wind distributed.

"BIOLOGICAL STRAINS OF THE STEM NEMATODE

"Strains morphologically alike.

All strains in form, size, and structure apparently identical.

"Specialized host preference.

Strains appear to prefer in nearly every case the host from which they came.

'Biological strains' referred to constantly in European literature.

Narcissus strain said not to affect hyacinth, and vice versa.

Alfalfa strain different from either.

Strawberry strain still another.

Some strains take readily to other hosts, e. g., narcissus to onion.





"Experimental results.

Much truth to this concept.

Lines not absolutely distinct, however.

Narcissus strain will infest hyacinth, though slightly.

Strawberry strain will infest clover in seedling stage.

Clover strain will infest alfalfa, and vice versa; not nearly to degree that each will infest its own host.

Narcissus strain will infest clover and alfalfa, often killing in seedling stage; some plants developed typical symptoms.

Experiments under favorable conditions existing in humid coast region (Seaside, Oregon) gave results as follows:

"Plantings May 8, 1923. Readings June 15.

\* indicates eelworm present.

\*\* indicates slight distortion.

\*\*\* indicates pronounced distortion accompanied by dwarfing.

<u>Plants inoculated.</u>	<u>Strains of eelworm.</u>				
	<u>Narcissus</u>	<u>Alfalfa</u>	<u>Clover</u>	<u>Strawberry</u>	<u>Hypochaeris</u>
Alfalfa	*	***	*	*	-
Rye	*	-	-	-	-
Wheat	-	-	-	-	-
Red clover	*	*	***	*	-
Oats	-	-	-	-	-
Buckwheat	**	**	*	*	-
Alsike	*	*	*	-	-
White clover	**	**	**	*	-
Barley	-	-	-	-	-
Pea	*	*	**	*	-
Strawberry	-	-	-	***	-
Turnip	*	*	*	-	-
Onion	*	-	*	**	-



<u>Plants inoculated.</u>	<u>Narcissus</u>	<u>Alfalfa</u>	<u>Clover</u>	<u>Strawberry</u>	<u>Hypochaeris</u>
Hypochaeris	-	-	-	-	**
Potato	*	*	-	-	-
Polygonum	*	*	*	-	-

Later observations showed the following interesting results on persistence of the disease in new hosts:

Date, Aug. 2, about 12 weeks after planting.

<u>Plants inoculated</u>	<u>Narcissus</u>	<u>Strains of eelworm</u>		<u>Strawberry</u>	<u>Hypochaeris</u>
		<u>Alfalfa</u>	<u>Clover</u>		
Alfalfa	-	***	-	-	-
Red Clover	-	**	***	-	-
Buckwheat	***	***	-	-	-
Chenopodium (a weed)			***		
			1 plant		
Alsike	*	***	***	-	-
		bad	few		
White clover	-	***	***	-	-
		few	few		
Strawberry	-	-	-	***	-
Turnip	-	-	***	-	-
Polygonum sp.	***	***	***	-	-
Stellaria media	-	-	***	-	-
Rumex sp.	-	-	*	-	-
Potato	-	-	-	*	-
Hypochaeris radicata	-	-	-	-	**

#### "Greenhouse experiments.

"Early cross inoculations in greenhouse showed distinct preference of each nematode strain for the host from which it came. Infections from cross inoculations secured, however, in seedling stage and in young leaves.





Plants	Number of young plants infected and not infected.								
	alfalfa			clover			strawberry		
	inf.	not	%	inf.	not	%	inf.	not	%
Alfalfa	603	83	88	80	206	18	78	113	40
Clover	79	332	19	820	685	54	63	242	21
Strawberry	1	5	<u>17</u>	0	6	<u>0</u>	9	0	<u>100</u>
	very slight								

In every case healthy plants were removed; eventually all diseased plants recovered except where inoculated with their own strain.

Inoculations on bulbs with clover, strawberry, and alfalfa strains gave slight infections in leaves. Inoculations with bulb strain at same time gave abundant infection. Bulbs planted with other strains, ripened and matured, and when planted next season showed no sign of disease.

"Further work necessary.

Effort is now being made to determine if there is a gradual adaptation to a new host. Much more work must be done."

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#### "FARCISUS FLIES

"Merodon equestris - Foreign bulbs have been charged with the responsibility of introducing the so-called bulb flies into this country.

"In this connection, attention is directed to the statement of Raymond Osburn, then of Columbia University.

"! Merodon equestris, Fabricius - This species has been



taken previously a number of times in America, but it has always been assumed that it was in each case an accidental introduction from Europe in plant bulbs in which the larvae live. The occurrence of the species in several localities, and especially the number taken in British Columbia, make it seem certain that it properly belongs to our North American fauna. Mr. Harvey has taken numerous specimens at Vancouver, frequenting especially the flowers of the Salmon-berry (*Rubus spectabilis*).'

"Leroy Childs, in the Monthly Bulletin of the California State Commission of Horticulture, February, 1914 (p. 73) reports that this fly was taken by E. B. Whitney of San Rafael, California where he reported it living in the bulbs of amaryllis.

"The specimen was identified by Dr. J. M. Aldrich who advised that the fly had also occasionally made its appearance in the East. He also referred to Osburn's conclusion that the fly must be native.

"In conclusion Childs states that the insect has never been reported occurring in alarming numbers in the United States, and that exceedingly little is known relative to its distribution.

"In this connection it may be noted that *Merodon equestris* was intercepted in Hawaii on a shipment of daffodil bulbs from California. (Report of Hawaiian Forester & Agriculturist - Nov. 1920, p. 326-27, V. 17, No. 11 -)



"As early as 1913 it was found by Weiss in New Jersey.

(Psyche, v. 22, p. 105, Journal Economic Entomology, v. 9, p. 212

"In 1916 W. H. Davidson, Scientific Assistant, U. S. Bureau of Entomology, reported that 'the Narcissus bulb-fly (*Merodon equestris*, Fab.) is apparently now established in Central California (9 Journal Economic Entomology 454, 457 - 1916).

"Metcalf, referring to *Eumerus strigatus* in 1919, said that he believes that this species, like its companion in habit *Merodon equestris*, is 'thoroughly established in widely separated regions of this continent;' and that many other records of its occurrence at intermediate points will be forthcoming. (C. L. Metcalf, Ohio State University, 30 Entomological News, 170.)

"Eumerus strigatus, Fallen. - This fly also is not new to the United States and is widely distributed throughout the country. Even if this were not so, the economic status of the fly is disputed.

"E. R. Sasser, Entomologist and Executive Officer of the Board, formerly in charge of the Plant Quarantine Inspection Service, reported that 'this bulb insect is known to be established in the States of California, Washington, Colorado, Ohio, and Maine and mentioned also that the economic status of the fly is in dispute. (Journal of Economic Entomology, V. 12 - April, 1919. - Farmer's Bulletin 1326, p.22.)





"The Department again reported it to be 'established' in all of these States, but added the State of Texas. Although it was pointed out that its host plants include amaryllis, onion, iris, hyacinth, shallot, and narcissus, it was stated that 'apparently narcissus seems to suffer most from its attack.'

"The Department also reports that the fly was first noted as occurring in the United States in 1906 (prior to the passage of the Plant Quarantine Act.) (Farmers' Bulletin 1362 - 'Insects Injurious to Ornamental Greenhouse Plants,' by C. A. Weigel, Entomologist and E. R. Sasser, Collaborator, Bureau of Entomology p. 23.)

"Weiss, in 1915, expressed the opinion that it had been found on iris in New Jersey. (Psyche, V. 22, p. 105 - 1915, Harry B. Weiss.), and Weiss and Nicolay three years later reported it at Rutherford, N. J. (30 Entomological News, 24 - 1919.)

"It is of course obvious that the date on which an insect was first noted does not necessarily fix the time of introduction.

"Johnson reports the occurrence of *Lumerus strigatus* F. at Buffalo, New York, in 1908, and at Brookline, Massachusetts in 1909, and added that 'the presence of this species in such widely separated localities seems to preclude the possibility of recent introduction.' (17 Psyche, 228, 230 - 1910 - Chas. W. Johnson, Boston Society of Natural History.)



131 "Gibson stated that 'Eumerus strigatus is now widely distributed in North America, having been found in the United States in the States of California, Connecticut, and New York, and in Canada in the Provinces of Quebec, Ontario and British Columbia.' (Arthur Gibson, Entomological Branch Department of Agriculture, Ottawa. - 49 Canadian Entomologist, 190.)

"Metcalf, referring to Eumerus strigatus states that 'its reported distribution ranges from Maine to California and from Texas to British Columbia, Ottawa and Quebec. I believe that this species, like its companion in habit Merodon equestris, is thoroughly established in widely separated regions of this continent;' and that many other records of its occurrence at intermediate points will be forthcoming. (C. L. Metcalf, Ohio State University - 30 Entomological News 170-1919.)

"W. M. Davidson, Scientific Assistant U. S. Bureau of Entomology reported that Eumerus strigatus, Fallen, has 'apparently become established in the San Francisco Bay region. (9 Journal of Economic Entomology, 457 - October, 1916.)

"In 1915 Davidson referred to Felt's discovery of the fly in New York in 1911, and to prior records of its occurrence in New York, Connecticut and Texas. He added that 'it would appear that this European insect has a wide distribution over the United States since it has been taken in the East, South and West.' (J. E. Davidson, 1915, Entomological News 170-1919.)





Davidson, - The Canadian Entomologist, V. 47, p. 134.)

"Its occurrence was again noted by Miss Broadbent, Junior Entomologist, U. S. Bureau of Entomology, on shipments of narcissus from California and Bellingham, Washington, in 1924 (13 Journal Economic Entomology, 141, 142 - February, 1925.)

"Felt, who reported this fly in New York in 1911, again reported its occurrence in July, 1925. He stated that the insect had probably maintained itself during the 14 year period and presumably longer. 'This introduced insect is evidently widely distributed in New York State, since supplementary collecting last July resulted in the capture of flies at Amsterdam, Schenectady, Albany, Greenville, and Athens in the eastern section of the State and at Geneva in the Central portion. None were found on iris collections at Rochester, East Aurora and Fredonia in the Western section of the State. These negative records by no means indicate the absence of the species, since in the brief time available for collecting it was impossible to make an exhaustive search for the insect. In no instance this year were the flies associated with material injury to the iris.' (E. F. Felt - Journal Economic Entomology, October, 1925, p. 751.)

"It is worthy of note that Felt did not report the fly as occurring in the onion fields, and that they were not definitely associated with material injury to iris.



"In Department Bulletin 1270 issued October 11, 1924, it is stated:

"The lesser narcissus fly (*Eumerus strigatus* Fall.) in the writer's opinion does not attack healthy narcissus bulbs although commonly found not only in these bulbs but in many other genera as well. \* \* \* The status of the lesser narcissus fly has not been studied sufficiently in its relations to other crops, such as the onion. In an experience of seven years with it the writer has seen no evidence to indicate that it attacks healthy narcissus bulbs, but that it commonly follows mechanical and other injuries which cause the bulbs to rot." ('The Production of Narcissus Bulbs' - Dept. Bull. 1270, p. 23-24. - By David Griffiths, Horticulturist, Office of Horticultural Investigations, Bureau of Plant Industry.)

"This opinion expressed by the Department is confirmed by the English scientists. In 1922 the Ministry of Agriculture and Fisheries, in a publication entitled 'Narcissus Cultivation,' said; 'It is still uncertain whether this fly as a rule attacks sound bulbs and there is some evidence to show that it prefers a bulb which is suffering from another disease.' (Ministry of Agriculture and Fisheries, Leaflet No. 224, p. 9.)

"Although entomologists have frequently referred to *Eumerus strigatus* as a fly which has been reported in Europe to have destroyed a whole crop of onions, it is significant that personally



they have noted no such infestations, and this in the face of the fact that the fly has been reported widespread and established in this country.

"The source of these statements doubtless is Bouché, who in 1847, in a paper of the Entomological Society in Stettin, stated that he had bred *L. aeneus* and *E. strigatus* (which he considered distinct, though both are now considered synonyms) from bulbs of the common onion, and that they sometimes destroyed a whole crop. This paper has been referred to by Verrall and is apparently the basis of the frequent statements to the same effect.

"It is significant, however, that Verrall, referring to the paper by Boucho, said: 'It has been bred from the common onion (*Allium Cepa*) as I have mentioned on page 615, though the species of this genus always seem to me to have some connection with the small aculeate Hymenoptera. It is recorded from all North and Middle Europe and also from Italy.' (G. H. Verrall, in 'British Flies' Vol. 8, p. 615, 622.)

"This doubt as to the identity of the pest has not been repeated by those who have mentioned the reported destruction of a crop of onions in Europe.

"It is worthy of note that although *Enmerus strigatus* is common in England, and was reported in 1920-21 as occurring on Narcissus in several parts of that country, it was not reported





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as attacking onions. (Report on the Occurrence of Insect Pests on Crops in England and Wales - 1920-21 - Ministry of Agriculture and Fisheries - Miscel. Pub. No. 39, p. 37.)

"The absence of records of damage by *E. strigatus* has been noted by Weiss and Nicolay, who said: 'Considering the fact that it was first noted in the United States in 1906 (Chittenden), it is strange that more records of it have not turned up.' (H. B. Weiss and A. S. Nicolay, New Brunswick, N. J., in 30 Entomological News, 24 - 1919.)

"It is not noted in Dr. Chittenden's article on 'Insects Injurious to the Onion Crop,' (Yearbook, Dept. Agr. 1912 - Separate 594) nor in Walker's 'Onion Diseases and their Control.' Farmer's Bulletin 1060.)

"In any event the fly is established in the sections from which the public would be obliged to draw their supply of narcissus if foreign stocks were not available."

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#### DOMESTIC STOCKS.

"On January 29, 1925, the Board called a conference for the purpose of considering the advisability of still further restricting the importation of fruit and rose stocks.

"At this conference a resolution adopted by the American Association of Nurserymen was introduced. This resolution was in-



troduced by the following paragraph:

"Without admitting that any quarantine action can justly be based upon the availability of domestic stocks, it is resolved" etc. (Transcript, p. 35.)

"Commenting on this resolution the Chairman said: 'I agree most heartily with the opening paragraph of the resolution from the American Association of Nurserymen "without admitting that any quarantine action can justly be based upon the availability of domestic stocks." We agree that that is no basis whatsoever for a quarantine issued by the Federal Horticultural Board, but I think we all understand the situation. We have balanced a risk against an horticultural need. Now that is subject to question too, and properly, that is subject to criticism. Have we any right to make such a balance? And the people who argue on one side have just as good a standing as the people who argue on the other. My own opinion is that the Board and the Department of Agriculture - because it is the Department and not the Board - will be criticised perhaps more twenty years from now for possible laxity than for any stringency or radicalness of action. We will probably be called to account for balancing the risk against an horticultural need. We will be called to account for giving reasonable time for experiment and adjustment possibly. I hope not. But the Board has had the belief and opinion that when con-





ditions were not so acute as to demand immediate action, where the danger was not absolutely a new one and an overwhelming one, the Department was justified in giving a reasonable period for adjustment, giving reasonable notice. But the proof of the accuracy or wisdom of the Department in so doing can only be settled years after.' (Transcript, p. 56.)

"The Department's estimates of available domestic stock are doubtless based upon returns made by growers, many of whom have embarked in this enterprise this year or during the three years last past. It cannot be claimed that such growers are experienced or have the benefit of a century of accumulated experience enjoyed by the foreign growers. The effect of inexperience on estimates of crop returns is sharply pointed out in the Department's publication on Production of Narcissus Bulbs. (Department Bulletin No. 1270.) At page 26 the Department says:

"To visualize the yield in a narcissus crop is one of the most difficult tasks. This is because both the stock planted and that dug are so variable in size, and the multiplication must of necessity be in numbers of bulbs, for this is the basis on which they are always sold or estimated in this country. Any estimate of yield, therefore, must presuppose on the part of the reader a large degree of familiarity with the stocks. It presupposes that he is able to translate numbers into size and coordinate the two



intimately related factors.' (pp. 26-27.)

"The tables following this statement show a variance in the yield, affected by the size of the bulbs planted, the variety planted and the quality of the soil.

"The Bulletin continues as follows:

"! The grower who contracts for double-nosed daffodils and gets not only the two-nosed bulb but the clumps as dug, including three or four noses, and bases his estimate of yield on the multiplication the first two years, is certain to be unpleasantly surprised to find the yield dropping off in later years. Even if the grower continues his culture by planting back all of his stock for five or six years he is still prone to overestimate, for the reason that when he begins to sell both round and double-nosed bulbs his yields are going to take a tremendous slump as compared with his yields when bulbs of all sizes are planted. It is only when he has learned what percentage of large bulbs it is necessary to plant back in order to maintain stocks under his conditions that he knows what to expect in the way of yield.' (p. 28)

"In conclusion, the Department states that 'experience covering two or three biennial digging periods is necessary to enable the grower to form an accurate estimate of the success of his venture in the production of his crop.' (p. 31.)

"Again, as showing the effect of soil, and the liability



to err in estimating the crop of bulbs for sale, the Department says:

"All this, be it remembered, relates to the production of bulbs. There has never been a time on any soil when the floral display in the spring was little if any short of perfect. So pronouncedly and uniformly good have been the floral displays each spring that keen plantsmen have been loath to believe that the daffodils were not adapted to these heavy soils. It is fortunate, in a way that circumstances have been such as to permit the making of a demonstration so decided.' (p. 29)

"Touching on Paperwhites, the Department says:

"A great deal of complaint has appeared, most of it deservedly, regarding stocks of Paperwhites Grandiflora which have found their way to the market from those grown in this country in recent years. The failure of such bulbs has been taken in some quarters as proof of the unsuitability of American conditions to the production of these stocks. The real trouble has been lack of knowledge of what constitutes good stock.' (p.p. 20-21.)

"Estimates of acreage are likely to prove definitely misleading. Unless the number of varieties are stated and the percentage of each grown it is obviously impossible to say whether the commoner or better varieties will be available. Different varieties vary also in rapidity of propagation. (Dept. Bulletin





1270, p. 16) A report from a grower that he has ten acres of narcissus may appear rather encouraging but when it is remembered that the greater part of his stock must be retained for propagating purposes if the capital is to be kept unimpaired, and that the saleable crop must be divided by the number of varieties grown, it is apparent that American consumers will have no assurance whatever that a demand for a particular variety can be filled.

"At best, the total of such estimates as have been made by domestic growers, is a total of the hopes and expectations of the inexperienced.

"The difficulties in the way of the establishment of a narcissus industry in this country in the near future, sufficient to supply a fractional part of the demand, are graphically set forth in the Department Bulletin referred to. The Department says:

"One of the most difficult and expensive items in the production of narcissus bulbs for our home market is the propagating stock required to initiate the venture. This planting stock is both difficult and expensive to get, for the grower needs more than 300,000 bulbs of all sizes to plant a commercial acre intensively and about 100,000 to plant on the "American plan." Of the larger sizes, 100,000 to 175,000 bulbs to the acre would be sufficient. Manifestly the initial expense is prohibitive except under a capitalization too heavy for many private individuals to bear, if the grower is dependent upon the supply of first-quality bulbs for



his propagating materials.

"Fortunately, it may not always be necessary to buy such expensive materials, although some growers and possibly most of those now starting to produce daffodils in this country have started their stocks this way from bulbs offered for sale in autumn for florist and bedding uses. Possibly the best way to start is to buy bulbs by the bed as dug, getting all sizes, but this plan is impracticable at the present time in this country, where there are few established growers. This avenue is open to few except those who can establish foreign connections or who have a venture large enough to enable them to make such a connection. Such propagating material is available, however, to the foreign grower at more reasonable prices. Such stock is regularly sold in Europe by the bed, by the hectoliter, or by the bushel.

"There are in this country a few established plantings. Some of them are very old. They contain the most common and in some cases very old varieties. Nevertheless, these are an asset that may be utilized as far as they go for the establishment of commercial plantings." (p. 2)

"The planting of 1,000,000 bulbs is doubtless a great undertaking, but if planted intensively (300,000 to the acre) it represents but 3-1/3 acres. If planted under more normal conditions it would represent but 10 acres, divided perhaps into 50 or more





varieties with two thirds or more held back for propagating purposes."

Mr. Vogelsang (Continuing). Now, I am practically through, excepting that I want to introduce several petitions to the Secretary. One of them is from New York addressed to the Secretary of Agriculture under date of November 10, 1925 and is signed by the importers of the Chinese sacred lily, in which they say:

"Understanding that you have issued a call for a Bulb Conference to be held in Washington on Monday November 16th 1925, to obtain full facts and data, relative to the embargo against unrestricted imports of Narcissus Bulbs scheduled to take effect January 1st 1926 --

"We, the undersigned Importers and Distributors of Narcissus Bulbs from China (commonly called in the trade Chinese Sacred Lily Bulbs) hereby respectfully request that as effecting the imports of these bulbs from China, no embargo whatever be maintained and that unlimited imports as heretofore be permitted for the following reasons --

"FIRST - To the best of our knowledge and belief these bulbs are free from any infestation in the shape of Narcissus Fly or Eel Worms.

"SECOND - That practically the entire imports of these bulbs are used by the American public in the shape of planting in



bowls, surrounded only by pebbles and water, and grown in their own homes and therefore we can in no way see that the continued unrestricted importation of these bulbs would in any possible way effect, or offer any means of contamination to any growing plant or other horticultural product.

"Respectfully submitted by the undersigned, being the principal importers and distributors of Chinese Narcissus Bulbs."

This petition is signed by the following:

"Henry Lee, New York,

"Hogewoning & Sons, Inc.

"Vaughan's Seed Store

"The Yokohama Nursery Co., Ltd.

"E. H. Scott, Atty.

"McCrory Stores Corp.

"F. W. Woolworth Co."

I also offer several letters and two petitions from the producers and shippers of French narcissus. The first one is from the Cooperative de Producteurs de Bulbes. It is dated November 1, and is signed by Martial Bremond.

These producers and shippers handle 18,000,000 Paper-whites. Mr. Martial Bremond is present. This is introduced by him. It is signed by a very large number of the producers of that particular



district.

There is a petition here under date of November 2, 1925 and one under date of November 5, 1925, both of which have been signed by a very large number of French growers. The one under date of November 2 reads as follows:

"Understanding that the United States Secretary for Agriculture has called a Conference of parties interested in the threatened Narcissus Embargo, we take the opportunity of presenting through the committee of the American Bulb Dealers Association the following statement of facts and our argument as to why the Narcissus Embargo should not be put into force.

"We have been growers, packers and shippers of French Paperwhite Narcissus Bulbs from Ollioules, from father to son, for the past fifty years and we can truthfully state that the condition of the fields in Southern France, as far as being infested with the Narcissus Fly is concerned, is of only small and negligible percentage.

"For many seasons, it has been our custom, in the winter months, to purchase the flowers out from the growing Narcissus Bulbs, pack them and ship such flowers to the English market. We never saw in our life any Narcissus fly in the fields or on the bulbs themselves in the packing sheds, where we personally each season receive, grade and pack something like 8 to 10 thousand





cases of Narcissus Paperwhites per annum.

"We were able to know the amount of rainfall prevalent for the preceding twelve months in the State of Florida and found it was greatly in excess of the rainfall we have normally in Southern France (Ollioules-Toulon district) where Paperwhites are grown and shipped in the late spring and early summer months, at a time where here the weather normally turns dry and warm, enabling the bulbs in their sandy soil to become much more quickly matured and cured.

"One of the great detriments about growing Paperwhites commercially in Florida is the fact that the harvesting and curing season in Florida is normally more wet than the growing season, which would prevent the proper harvesting and curing of these bulbs and which, in all probability, is one of the chief reasons why Florida grown bulbs have thus far proven to be unfit for forcing purposes, when tried out and used by Florists in America who have been accustomed only to the forcing and growing of well matured Southern French grown Narcissus.

"The French Narcissus Paperwhite, as well as the Soleil d'Or, are not true Daffodils, but of the Polyanthus family and is not so liable to attack of the Narcissus Fly or grub, which is known to affect more or less the Holland type of Narcissus."

The petition under date of November 5 reads as follows:



"Understanding that the United States Secretary for Agriculture has called a conference of parties interested on the threatened Narcissus Embargo, we take the opportunity of presenting through the Committee of the American Bulb Dealers Association the following statement of facts and our argument as to why the Narcissus Embargo should not be put into force.

"We have been growers of French Paperwhite Narcissus bulbs in Southern France for a great many years; we can truthfully state that the conditions of the fields in our district, as far as the infestation with Narcissus fly, is of such a small percentage that it is not to be taken in account.

"We further state that the condition of the soil, the warm and dry climate we have in the summer months, the interdiction of watering bulbs, make conditions ideal for obtaining sound, well matured and properly cured bulbs.

"Useless to say that our own interest commands to exercise the greatest care to avoid our bulb fields to be infested with insect pests and diseases; our French phytopathological service is still open to help fight them, should eventually any attack our crops.

"We may add that Paperwhite, as well as Soleil d'Or are of the family of the Polyanthus Narcissi and not of the Daffodils; therefore they are much less liable to the attacks of the Narcissus





Fly, which is rather prevalent in Daffodils of Dutch origine.

"In testimony of which, we, actual growers of Narcissus have signed as follows:"

These growers represent 44,000,000 Paperwhite bulbs per annum/out an ordinary export of 60,000,000.

I have here a letter from Mr. Tassy under date of October 21, 1925, which was translated by the commercial attache of the French Embassy whose name is B. Lachelier.

The letter from the commercial attache referred to reads as follows:

"Mr. Tassy, before his departure to France, wrote me a letter concerning bulbs, of which I enclose a translation assuming no responsibility for the letter."

The translation reads as follows:

"As a delegate from the 'Ministere de l'Agriculture' to the Phytopathological Service, as Director of an important Syndicate of Narcissus Bulb Growers and as a member of the Regional Committee of Bulb Growers, I beg to send you the following conclusions regarding the question of French bulbs, which are the result of my experience and of that which I have learned during my trip through the United States.

"The F. H. B. proposes to forbid, in its decision called



'Quarantine 37', the entrance of French bulbs into the United States after the first of January 1926, contending that our bulbs contain harmful insects which might injure other kinds of plants.

"This contention may be answered as follows: In France we have grown bulbs called 'Paper whites' for more than forty years. I myself have been in the bulb growing business for more than twenty years. We have never found a truly dangerous disease in these bulbs, the culture of which has been more and more beautiful and prosperous. This uncontestable fact is known by everybody.

"Furthermore, we can certify, without fear of contradiction, that in the very land from which our bulbs have just been dug, as well as in the fields nearby, we grow all kinds of vegetables and very delicate and sensitive plants, and never the slightest disease has been recorded. About this we can be positive and we can add, as a further proof, that our regional production of fruit and early vegetables is of the highest grade.

"Consequently there is no reason for believing that our bulbs might be dangerous for the country into which they are imported.

"An American grower has told me that a certain fly brought from Japan in the roots of plants had produced much damage in the cultures of the region in which it had engendered; that this fly was not in the least harmful in Japan because its eggs were destroy-



ed almost entirely by another insect, but that in America this enemy of the said fly could not do anything against it, since the American climate does not permit the second insect to live. Some people say that this phenomenon might take place in the disease which is supposed to exist in narcissus.

"I answer simply: Narcissus have been imported into America each year by tens of millions for about thirty years, and these cultures have not been attacked by microbes of narcissus any more than in France. Microbes, insects, and worms can be found everywhere, without being a cause of injury to any culture.

"In our case, I assert again that a thirty year old experience shows clearly that narcissus have never injured any other plants.

"Regarding bulb culture in America, I am convinced, after examination of some bulbs that neither the ground nor the climate are favorable to this plant.

"A narcissus hardly reaching the necessary size for the sale to florists, when open shows signs of well characterized degeneration, as our experience allows us to appreciate, and which will soon make any culture impossible.

"The signs of this degeneration have been found in some regions of the South of France where the bad composition of the ground was unfavorable to the continuation of cultivation. For





this reason, narcissus growing is concentrated in a very narrow area in our country.

"When Dr. Marlatt was in France, he was impressed by the fact that fields are exposed to the sun on hillsides and that they are not at all irrigated, that the earth is compact and the climate dry. No culture can be done in better conditions. I merely repeat here the words that Dr. Marlatt said during his visit of narcissus fields in one of our centers of culture, at Carqueiranne near Ollioules, when I had the honor to be with him.

"It should be believed, therefore, that after an exhaustive study of this question the Government of the United States will allow us to continue to export French bulbs into America, as in the past.

"Hoping that this letter will be of help to you in supporting the French culture, I am -"

I have also a letter from Mr. A. Bernard, of Ollioules, France, dated at New York, May 26th, 1925, which reads as follows:

"I, Mr. A. Bernard, of Ollioules, France have just completed a trip to California, Texas, Florida and other parts of the United States with the idea of investigating, to see if suitable soil and climatic conditions were available for the planting and culture on an extensive scale of the Paperwhite Narcissus Bulbs, which I have raised and packed and exported for the past thirty five years from



Southern France.

"After most exhaustive study, I have come to the conclusion that as far as California is concerned the climate is too cold during the Spring months of the year and likewise the rainfall or percentage of moisture is too excessive to produce bulbs that will force in the Greenhouses where the larger quantity of them are now used.

"As to Florida, my conclusions are that the soil is likewise too moist and that the climate is too warm in the Autumn, which would produce a premature flower -- therefore, preventing the bulbs being of sufficient strength to be finally used for satisfactory forcing in greenhouses.

"I have come to the conclusion, that as yet there is no available or satisfactory locality discovered where Paperwhite Narcissus (similar to French Grown Stock) can be successfully grown or cultivated to produce satisfactory forcing bulbs.

"I further would state that in the many years, some thirty five, of growing and handling French Grown Paperwhite Narcissus in the Districts of Ollioules, Toulon and nearby territory, I have never seen any fields infested with Narcissus Fly or Eel Worm to any material degree -- or to any degree where it affected the flowering or foliage of the bulbs growing in the open fields.

"Further in the handling of the dormant bulbs, after





they are cured and ready for packing and exporting, I have never at any time been able to discover any indications of the bulbs themselves being affected, in any way, with bugs, insects or animal life of any character whatever either active or dormant.

"These statements can readily be verified by several hundred of the individual growers of the bulbs themselves in Southern France."

Mr. Chairman, I now introduce in evidence a paper written by Dr. E. van Slogteren entitled "The International Exchange of Agricultural and Horticultural Products," and while I do not ask that it be incorporated in the record I do ask that the Secretary read it in connection with this whole matter.

Now, for the moment, I will withdraw from the platform. I will not take it again unless it is necessary. (Applause from the opponents.)

Congressman Free: Will you submit to a question?

Mr. Vogelsang: Yes.

Congressman Free: You mentioned the matter of retaliation. Is it not a fact that for 25 years Holland has had an embargo against American fruit trees and other plants from this country?

Mr. Vogelsang: I do not know.

Congressman Free: I will ask Dr. Marlatt if he will kindly answer that question. I will ask you also, Mr. Vogelsang, is it



not true that France has imposed the same restriction?

Mr. Vogelsang: I do not know.

Congressman Free: I would then ask Dr. Marlatt to state what the embargoes from those countries, who are making their appeal to us today, are.

One other question, Mr. Vogelsang. You mentioned possible embargoes on account of the San Jose scale. Isn't it a fact that due to our liberality by permitting Chinese peach trees to come into the United States we brought in here the San Jose scale, on account of which we are now threatened with embargoes from foreign countries?

Mr. Vogelsang: I do not have the genesis of the San Jose scale. I think it has been here for 40 years.

Congressman Free: As a matter of analogy with respect to the dangers that we in California now are in again, I appeal to Dr. Marlatt to put in the history of the San Jose scale to show that it did come in because we were liberal in permitting peach trees to come in from north China and that because we now have the San Jose scale we have been subjected to embargoes from various countries, including Holland and France. (Applause from the proponents.)

Mr. Vogelsang: One question, please, Mr. Free. If this thing came from north China, how in blazes did they come to name it after your native town?



Mr. Free: I suppose that they wanted it named after the most delightful city in the United States.

Mr. Vogelsang: I disagree with the gentleman on everything else, but on that point I am with him.

Assistant Secretary Dunlap: Are there any others here who have not spoken against this quarantine who desire to be heard at this time?

Mr. Frank R. Pierson: I am chairman of the Board of Directors of the Horticultural Society of New York. I am here in response to a mandate. I have been sent here to register the protest of that society against any further embargo on narcissus bulbs. Mrs. Pratt has most admirably presented the phase of the Horticultural Society in her presentation, representing the facts as they stand with respect to the amateur interests of the Garden Clubs. It won't be necessary for me to add further to that, except to endorse it, except to say that it is thoroughly endorsed by the Horticultural Society of New York.

I would like at this time to go on record for the Society of American Florists in regard to their position in connection with the embargo on narcissi. At the convention held in Detroit, to which Dr. Marlatt has already alluded, the Society went on record as objecting to any further extension of the quarantine. Dr. Marlatt was at that convention and I believe he will endorse





that statement. The Society which met again at Hartford, Conn. two years later, reiterated that position and again objected to any further extension of the quarantine. In Buffalo at the Board of Directors' meeting last year the Board of Directors went on record, objecting to any further extension of the quarantine, so that the Society as an organization is on record along these lines. I wish that to be made at this time a part of the record for Dr. Jardine's consideration.

I am president also of the Federated Horticultural Societies and Florists' Clubs of the State of New York. That organization several times has gone on record opposing this quarantine, or at least the further extension of the quarantine.

Dr. Marlatt: You mean, regardless of any need for extension?

Mr. Pierson: No, but not conceding that there is any necessity for it. This morning when I looked at these lantern slides I became horror stricken. It reminded me of the days many years ago when I was a little boy and they used to paint pictures to us, showing us what would happen to us if we were not good, saying that the boogaboos would catch us if we did not look out. In fact, I began to think that there was no use in growing anything commercially because the insects were going to destroy all our crops. Now, with respect to the San Jose scale, while that is not exactly



germane to the subject matter being discussed here, it is a fact that due to the San Jose scale, due to the measures of control which it has been necessary to take, the apple industry has become much more profitable than it was before. (Applause from the opponents.)

Mr. Vogelsang has touched on a very important point here, I think, and that is the question of reciprocity. I was chairman of the Tariff and Legislative Committee at the time of the Payne-Aldrich tariff was written, when we changed the advalorem rates into specific duties. A rate was agreed upon and, much to my surprise, before it was finally settled, I got a telegram from the Senate advisory committee to come back to Washington. What do you suppose they wanted? Senator McCumber asked me if I would not make a more favorable rate on Dutch bulbs. Why? Because, North Dakota, the state which he represented in the United States Senate, was a large exporter of flour and he wanted a much more reciprocal duty, favorable to Holland. That is very germane. It is a matter that ought to be considered, and I believe it will be considered eventually. It resulted in taking off a good deal of the duty on the Dutch products.

You have talked about the eelworm and magnified it. I am a rose grower. Twenty-five years ago we heard that the rose industry was going to be put out of business on account of the





eelworm. For the last 15 years, however, we have not heard a word at all about the eelworm. I think these insect pests are largely magnified. I believe they are not going to do any practical harm. They may do harm from a scientific standpoint, and under a microscope I suppose they look like elephants (Laughter).

Let us get back to a practical administration of the law. We all concede and it has been said time and time again that more than 80 per cent of the bulbs imported into the United States are used for forcing purposes and then the bulbs are destroyed. I do not care how they are destroyed. They are destroyed. They never can become a menace to horticulture or agriculture. Perhaps 15 or 20 per cent of them are used in the amateur gardens around the large metropolitan districts primarily. We have been planting them for years and years. I do not see, as a representative of horticulture, that we have anything to find fault with or to be afraid of at the present time. I cannot see any real justification for this embargo. I do think however that permitting these bulbs to come in indefinitely in large quantities under special permit constitutes a danger, if any danger exists, and that the special permit system increases the danger a hundredfold more than if we had simply a continuance of importation of bulbs as in the past. (Applause by the opponents.)

Albert C. Burrage: I appear as the representative of the



Massachusetts Horticultural Society, unanimously chosen by its trustees at a meeting duly held day before yesterday.

As a member of the so-called Committee on Horticultural Quarantine from its beginning on June 15, 1920, I have been familiar with the discussion concerning Quarantine 37. I fully understand that this hearing is limited to the question of the embargo on January 1st next upon the further importation of Narcissus bulbs and I shall confine my remarks to the question and speak of nothing that is not in my judgment germane.

In view of this, I will, I am sure, be allowed, in the interests of fair play, to make a disclaimer -- and this I do, not only for myself individually, but as President of the Massachusetts Horticultural Society and for those members whom I represent. We disclaim any hostility towards the Federal Horticultural Board as it is now constituted. We do not attack the character of the members of that board, nor do we criticise them as individuals. We believe in their sincerity and integrity and we think they are genuinely desirous of conserving and advancing the agricultural and horticultural interests of the United States of America. We accept at one hundred per cent face value their recent statement that they have not administered this law from the point of view of the tariff protection of the established horticultural interests of this country.



When the Committee on Horticultural Quarantine was created, on June 18, 1920, at the general conference in New York, I then stated that the trustees of the Massachusetts Horticultural Society believed in the law of 1912, authorizing the creation of a quarantine, and in the principle of a quarantine and the establishment of a quarantine, but that we did not approve certain provisions and omissions of Quarantine 37, and we urged that these regulations be altered to meet the conditions which we believed necessary for the fair protection and advancement of American horticulture. During the five years since that time, we have, we believe, consistently adhered to that position.

It does not follow, however, that because we recognize the character and ability of the members of the Federal Horticultural Board, we believe all that they believe or that we agree with the existing provisions of the administrative regulations of Quarantine 37 - and we believe we have a right, as citizens, to protest against such provisions as we consider inadequate or burdensome. Because the Federal Horticultural Board has been courteous to me as an individual, I do not lose my right to ask that board, or the Secretary of Agriculture, to change and improve the present vexatious situation. In this matter my personal interest is merely the same as that of hundreds of thousands of other citizens who have private gardens in which they take a deep interest





and in which they grow bulbs among other plants, and for such I am making this journey of a thousand miles to try and present to you the situation as we see it and to make certain suggestions which we believe will be helpful and which we shall urge you to adopt.

Narrow as is the point open to discussion here today, it is not a small or unimportant matter. In the United States proper there are over a hundred million people, and last year the United States, in addition to the bulbs raised here, imported over a hundred million narcissus bulbs, that is, practically one bulb for every resident. This does not mean that each individual received an imported bulb -- but from this statement it is evident that there are millions of people in the country who are personally directly interested in this matter. There are no politics in this matter, and it concerns the people of all sections of the country.

I often hear the remark "Man wants but little here below, but he wants that mighty quick and mighty bad." But it does not follow that every man may have all that he wants, and we admit that, even if we want bulbs, foreign bulbs - a hundred million of them - we should not be allowed to have them if in doing so we should cause irreparable or even great damage. We admit that the measure should be "the greatest good for the greatest number" - that is, the interest of the whole country and not that of any section or



any individual or class of individuals.

I am well aware of your article published in the ATLANTIC MONTHLY of last June on Plants and Plant Pests, and I have read and re-read it several times. In your article, Mr. Chairman, you say: "The bulb fly has now gained some foothold in the United States chiefly in connection with bulb production and has spread in at least one instance to onion fields." You wrote this last May, after hundreds of millions of Narcissus bulbs had been imported into this country during a period of many years. Does one such instance justify a complete embargo? Would you call a man an habitual user of profane language who was once, in his early youth, heard to exclaim "Damn" after bumping into a hornets' nest?

On the same page of the article you say that perhaps the most dangerous of all bulb pests is the European eel worm, and you say that it has already gained some foothold in the northwest and that "its introduction has apparently been through the agency of the planting of imported bulbs." The use of the word "apparently" means that even to the Horticultural Board the evidence is not certain that its introduction was due to the imported bulb and to that alone.

I listened this morning to the three carefully prepared, authoritative statements by the official experts of the Federal Horticultural Board, under the direction of the Secretary of Agri-





culture, describing the narcissus bulb insects, hoping that at last one of them would give an official statement as to the amount of damage, however great it is, that such insects have done to the plants and crops of this country.

If I heard correctly, not a single figure or statement was made upon this point, and it would be perfectly right and fair for every impartial hearer in this room to draw the conclusion that, at this important hearing upon this important matter, all available evidence would be presented upon this vital point, and that, if none were presented, none exists.

Mr. Secretary and Mr. Chairman, this is a serious matter, involving directly and indirectly millions of people and millions of dollars, and I am amazed that at this hearing no such evidence or conclusive statement has been presented, seeming to warrant or justify the proposed embargo.

It is true that statements and maps were presented showing that even before the date of the notice of the embargo three years ago, such narcissus bulb insects were not new in this country and were prevalent and, therefore, perhaps, bulbs bearing them may not be within the quarantine, but as this is a legal matter I pass it over.

But, Mr. Chairman, so far as I know, no statement has been made in behalf of your board that Narcissus bulbs cannot be freed



from dangerous pests by treatment and thereby made sound for importing and for use. On the contrary, you affirm, on page 782 of the same article, that "such material can be disinfected and safeguarded by the hot-water treatment" -- that is, for growing outdoors but not for forcing bulbs without seriously reducing the flowering.

If it true that we are importing annually a hundred million Narcissus bulbs -- 20% for outdoor growing and 80% for forcing -- and all those required for outdoor growing can be, as you say, "disinfected and safeguarded," and the only objection to it is the added cost of such treatment, then how can there be any justification for the exclusion of such 20%, or twenty million bulbs, or such number of them as the users are willing to pay for?

Further, if the remaining 80% can be similarly disinfected and safeguarded with but slight detriment to the flowering, then why should not these be allowed to come in and be so treated, so far and so long as the users are willing to pay the added cost? And this argument is based on the use of the words "horticultural necessity" as made in the publications of the Federal Horticultural Board. If the people of the United States have been buying such bulbs at the rate of one hundred million bulbs annually, can there be any question but what such bulbs are a horticultural necessity?" Mr. Chairman, can any one deny that if these bulbs are dangerous,



it is far better to import twenty million sound bulbs than it is to import, as we do now, ninety million sound bulbs and ten million defectives?

After a study of the publications concerning the availability of Narcissus bulbs grown in the United States, that is, the production of Narcissus bulbs sufficient to meet the reasonable demand in case an embargo becomes effective, I am bound to say, with many others, that the evidence so far presented does not warrant the claim that sufficient American-grown bulbs are available to meet the demands, and my information is that as yet our growers have not had sufficient experience or training to determine when such bulbs should be gathered for their proper curing. There is evidence available also that such bulbs have not been satisfactory, even when planted in this immediate vicinity.

Moreover, the Federal Horticultural Board, through you yourself, says, on this same page, 782, that "on the subject of the probability of home production of these bulbs to meet American needs, the Department is advised that very substantial progress has been made and that the outlook for the successful meeting of such needs within a few years seems favorable." You do not say that sufficient has been produced; you do not say that sufficient will be produced between now and January 1st. You do not say that





you know that progress is being made; you merely state that you are advised that substantial progress has been made. You do not say that sufficient bulbs or anything like it will be available next year; all you say is that "the outlook seems favorable for the successful meeting of such needs within a few years" -- which may mean two, three, four, five, or more, years.

We therefore claim that as sufficient American-grown bulbs are not obtainable, and will not be obtainable for some years, and -- as you admit -- that a large part of the requirements for foreign bulbs can be safely met through the hot-water treatment, to which there can be no objection except the cost, that the situation demands the postponement of the embargo until it can be definitely and satisfactorily publicly proved that more than one onion district has been injured by insects traced solely to Narcissus bulbs, and until it is similarly demonstrated that the hot-water treatment is not efficient or feasible -- and until it is similarly demonstrated that there are available American-grown Narcissus bulbs in quantities sufficient to meet the horticultural necessities.

I am not among those who accept the statement that foreign inspection, that is, the inspection of bulbs and other plants in the country whence shipped, should be taken "at par." For one, I do not believe, for reasons which are self-evident



and not necessary to refer to here, that the inspection of foreign plants or human beings by the representatives of foreign governments or even by our own representatives, made in the country of origin, is or ever can be wholly efficient and satisfactory. The number of immigrants who are rejected each year, even with the restrictions imposed by our own government at point of departure, to my mind conclusively proves that foreign inspection and treatment, in the case of plants as well as humans, prior to shipment to this country, does not meet the situation.

"We claim that inspection of foreign plants should be made here, by trained officers of our government, but we say that this inspection and the importation of such plants as the Narcissus bulb should be done differently and in a better way, with greater safety to the people of this country and their agricultural and horticultural interests.

From the beginning of this discussion I have continuously opposed, with others, the shipment of foreign plants from the coast to Washington for inspection, and have urged that imported plants be examined, treated and accepted or rejected at the port of entry, and that plant quarantine stations should be established at the leading ports, such as New York, Philadelphia, Baltimore, San Francisco, Seattle and New Orleans. This has not been done in a broad and satisfactory way, but only in certain places





to a minor degree. I am well aware that the chairman of the Federal Horticultural Board has publicly stated that, while such stations would be expensive to install and operate and perhaps not justified by the entries which would be made, nevertheless the Department of Agriculture would be willing to provide these facilities if Congress would appropriate the money for that purpose. Mr. Chairman, again I wish to say, with all due respect to your board and to the Secretary, that we think this does not meet the situation or that it will at all satisfy the vast number of people interested in this subject, and I am sure that you will, in view of what I have said, pardon me when I say that you can do more than this. We are not called upon to go en masse to Congress and ask for such an appropriation or for such action, even though we believe it to be wise and necessary and will gladly favor and aid in securing it. Mr. Chairman, is it not your place if you believe it would be better to establish such stations, to recommend such action to the Secretary of Agriculture and he, in turn, to recommend it to Congress?

We believe this should be done, and we urgently ask you to request that it be done and to furnish Congress with the data necessary for proper consideration of the matter.

In connection with this it will be pertinent to refer, for a moment, to what I have been told is done at present, and



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I will make the statement as given to me, knowing that if my statement is wrong you will immediately correct me and no one will leave this room with any doubt as to the correct situation.

It has been recently publicly stated that because of the lack of facilities, of inspectors and of appropriations, when foreign bulbs, such as Narcissus bulbs, are imported in quantity, as they are at present, all the government can do is to examine a small proportion such as two per cent of the shipment. In other words, out of a hundred boxes of bulbs, two are taken out and opened and their contents spread upon canvas and then from these, 100 bulbs are selected and cut open and examined. And it is said that in many cases, in fact, as stated by you, in nearly every case, such inspection reveals that a certain number are diseased or carry worms, even in some cases up to 25% - and I am further told that, regardless of the fact that such shipment shows some defectives, i. e., up to such 25%, nevertheless the rest of the shipment, even though it may be 8000 boxes, is allowed entry and the bulbs then distributed over the country.

Is it not fair, Mr. Chairman, for me to ask, under these conditions, if this is quarantine? What is the meaning of the word "quarantine?" What is the value of such inspection? Is it adequate protection to the horticultural interests of this country? Bear in mind that while asking these questions I constantly keep





in mind your plea of inadequate appropriation by Congress, all of which brings me back to what I said a few moments ago as to the necessity for quarantine stations on the seaboard at the port of entry, with adequate facilities and help. If such existed to-day and entry were allowed of only sound bulbs, a large part of the bulbs would be rejected and the danger from them, if any, averted.

We insist that the proper way to protect by quarantine the agriculture and horticulture of this country is to inspect all plants at the point of entry into the country and to reject there all those found to be very dangerous to the country. Surely it cannot be claimed that this country, with its present great prosperity, its immense wealth - the creditor nation of the world - with its vast appropriations and debt reductions, is not justified in appropriating the few thousand dollars which would annually be required for such quarantine stations and inspection.

Mr. Chairman, it is evident from the public statements that you have made, that you are aware that, for one reason or another, there is in certain places a strong opposition to certain rulings of the Federal Horticultural Board, like the present one under discussion. It may be, Mr. Chairman, that this is due - as you have suggested - to misstatements on the part of those who are opposed to the Board, but it may be - as I believe - more largely due to





misapprehension of the real situation, owing to lack of full explanation or action by your board or the Secretary of Agriculture upon this very matter of seaboard quarantine stations and the proper appropriations therefor.

And I have come here to call this forcibly to your attention and to urge you to act quickly in this matter and strongly, because I believe that in this way you will render not only a great service to the agriculture and horticulture of the country but will also remove a large part of the friction which has existed between the Federal Horticultural Board and the plant-lovers of this country and the societies representing them.

Of course, as plant-lovers, we do not ask or want to import plants which are dangerous, and from the discussions which I have had with others interested in this subject, I am prepared to give it as my individual judgment that the gardeners and home-builders of this country would favor the exclusion at the border of all material proved to be dangerous to plants, even if such rejection caused them to pay more for the remainder they were allowed to import. By this I mean that, in my judgment, if the Department of Agriculture does not think the country can afford to pay for the operation of such quarantine stations and the inspection and selection of bulbs and the rejection of defectives, then that they would be willing that the expense of such inspection and rejection



should be paid by further assessment u on those accepted and admitted. We do not want less inspection, but more, and that more rigid and made effective by the rejection of condemned material.

There can be no justification for the people of this country importing plants with dangerous diseases or insects. We have a right to say that foreign growers shall send us only sound and healthy material and that, if they do send defectives they shall be rejected at the place of entry into this country.

We say that, in view of the inadequate statements thus far made by the government and the non-production of conclusive evidence that the importation of Narcissus bulbs has done great injury to the country, we are not convinced that such great danger is clearly demonstrated, or that great damage has been or will be done to agriculture or horticulture in the United States. I believe that with the importation of these hundreds of millions of bulbs in the past three years, many diseased and defective bulbs have come in, but I have yet to read of or see the evidence which satisfies me, either as a layman or a lawyer, that great or even considerable damage has been done.

We, therefore, ask you to do two things: to make further examinations and secure the data and make full and complete statements of facts which will satisfy the Department of Agriculture





and the public that the importation of sound narcissus bulbs will or will not cause great damage to this country. It is evident that it is not possible to do this in the next six weeks; it certainly requires one or two cycles of seasons -- that is, at least two years, and my request, therefore, is that the Federal Horticultural Board, which has been asked by the Secretary of Agriculture to give this hearing and to reconsider this matter, postpone the proposed embargo until January 1, 1928, meanwhile making all necessary examinations.

I do not mean to minimize the work done by the Department of Agriculture, under the limitations of its appropriation; but I do say that the independent-thinking and reading people of this country who are interested in the matter are not satisfied that such embargo is a necessity or is justified. If the importation of bulbs is dangerous to this country, it is possible to prove that to the satisfaction of the majority. If such bulbs are not dangerous, they should be allowed to come in.

May it please the Board, we submit that there are not available American-grown bulbs sufficient for the needs of the people of the country, that foreign-grown bulbs, through selection, rejection and treatment, can be safely imported without bringing in dangerous diseases and insects, and that the importation of such bulbs is a horticultural necessity which should



not now be forbidden. (Applause.)

Assistant Secretary Dunlap: Are there others who have not spoken on the quarantine who want to be heard?

Mr. A. M. White: It is probably our turn to speak now, but I wish to yield for the moment to Congressman Abernethy. As far as our general statement goes for the committee, I should think it had better go over until the morning.

Assistant Secretary Dunlap: Yes, I think we will be compelled to do that. If there is no objection we will now hear from Congressman Abernethy.

Congressman Abornethy: Mr. Secretary, gentlemen of the board, and ladies and gentlemen, I am not an expert on plant posts because I come from a country where we do not have any, hailing as I do from North Carolina which has less than one per cent of foreign population -- foreign-born, I mean. For that reason, perhaps, I cannot get the foreign angle to this discussion.

Mr. Secretary and gentlemen of the board, I have heard some very nice compliments passed around with respect to the Federal Horticultural Board, particularly to its chairman. I never had the good fortune to meet him before this morning, but I desire to say, sir, for your benefit that I would very much dislike to be the head of a board that had to force an embargo



over on these folks over in this section. They have damned you, sir, with faint praise, particularly the last speaker.

(Laughter) The situation, as I see it, speaking to the board, if I listened here and have the right angle to this controversy, is that some three years ago your board placed this embargo and gave the people here engaged in the business of importing foreign bulbs three years in which to adjust themselves to the situation and that that decision on your part was approved by the late lamented Secretary of Agriculture, Mr. Wallace.

Now, I want to say further, Mr. Secretary, and gentlemen of the board, that of all the departments of the government, that the Department of Agriculture has the respect and confidence of Congress more than any other department. (Applause.) With all of the investigations, and they have been numerous, that have been going on, and with all the resignations that have been called for and accepted, none of those investigations nor none of those resignations have hit the Agricultural Department. (Applause.) And there is a reason for it. The Agricultural Department, to my mind, next to the Post Office Department, is closer to the people of the United States than any other department. It has the confidence and respect of the people. It has many able men who are experts and, like my friend, Mr. Magee of New York said this morning, when the Department speaks





through its experts as it has spoken here today, there should not be any question about keeping out these foreign pests. Why, sir, we have kept the foreigner out for a good deal less than what has been shown on this screen here today. (Applause by the proponents.) We shut out the foreigner although he does not happen to have the eelworm or the other pest with him. We have shut them out, and that is the policy of Congress. The American manufacturers of this country have appealed to Congress and Congress has responded, over my protest, and has kept out the importations to a great extent of foreign made goods.

Now, if we can grow flowers in this country, and we can, because the Department says we can (Laughter by the opponents.) and, sir, we have grown them. Not only has it been demonstrated out ~~here~~ on the Potomac farm that we can grow just as beautiful a lily or narcissus or narcissi -- or whatever you call them --- as can be grown in Holland. (Laughter by the opponents.) And, according to the experts here, the home stocks that were investigated under Dr. Howard's Bureau of Entomology, they were free from plant pests; and if I had any criticism to make of your board -- although I would not criticise it -- I would say the only trouble is that you have not been strict enough, that you have been too liberal with these folks and have let the embargo stay off too long. (Laughter and applause.)



These maps have shown that for the last three years as a result of these foreign bulbs these pests have multiplied and multiplied.

Now, I came here from North Carolina for this purpose:

We are engaged down there in that state and in the State of South Carolina and along the coast from Washington on down --- we were engaged, rather, in other kinds of agriculture, but our representatives were told, Go home and tell your people that an embargo is going to be laid against the importation of foreign bulbs. Get them interested. They can grow these bulbs in this country and they can grow them in the west. There has to be a certain supply, and as a result of that information handed to me as a member of Congress I went before the Appropriations Committee of the Senate and the House and insisted that they expend the money of the people to establish test farms not only in the State of North Carolina but also in other states of the Union. As a consequence, we got a lot of our people, American people, 100 per cent Americans, to go into this thing, and now you say on account of France and Holland and some other countries we cannot restrict the importation. Why, they ought to be put out of business for making any/suggestion. (Hisses from the opponents and applause from the proponents.)

I want to say here, in passing, that if Italy were here,





appealing to us, to permit importations of bulbs from Italy, I would feel more lenient than with those Frenchmen, although I have not anything against them. But they just won't pay their debts. (Hisses from the opposition.)

Speaker (Interrupting): Don't bring in those issues here.

Congressman Abernethy (Resuming): Mr. Chairman, and gentlemen of the board, I did not come here for the purpose of raising any argument but just to register my protest against the lifting of this embargo as an humble representative of Congress because our people were told by the Agricultural Department that if they went into this business that this embargo would not be lifted. (Applause by the proponents.)

Assistant Secretary Dunlap: This meeting will be adjourned in exactly five minutes. We must vacate at that time.

Mr. Elliott: The gentleman from North Carolina stated something to the effect that the State of North Carolina is not concerned in this matter especially. I wish to say, however, that last May when I was coming over on the Mauretania I met a gentleman from North Carolina in the smoking room. I believe His name was Wilson. He stated that it was the largest tobacco market in the world.

A Speaker: It is.

Mr. Elliott: I accepted that statement. He was very much concerned with regard to certain British manipulations of tobacco



conditions. It seemed that to him the export of tobacco was of very deep concern and also to <sup>other</sup> North Carolina interests.

Assistant Secretary Dunlap: The question is, what time shall we convene tomorrow morning? I would like to make it as early as possible.

William A. Graham: If I may say a word, please. I cannot be here tomorrow. I have got to leave tonight. I just wanted to assure <sup>you</sup> that the Department of Agriculture of the State of North Carolina has the utmost confidence in the Secretary of Agriculture and the Horticultural Board, and that we are perfectly willing, so far as this question is concerned, to leave it entirely to you gentlemen, without any argument, feeling that you are going to give this important matter proper consideration. As Congressman Abernethy told you, when it was announced publicly that this quarantine No. 37 would be put in effect January 1, 1926, the Department of Agriculture encouraged the farmers throughout North Carolina to go into the bulb business, as a result of which it was found that the coastal plane of our state from Goldsboro to Wilmington was an ideal place for this work. As a result of that there has been invested something like \$100,000 in our test farm at Willard, in cooperation with the Federal Government. We have been experimenting in bulbs to encourage the farmers of our state. Our people are very much exercised over the



matter, with regard to these insects that are liable to attack other crops, these insects that come in with bulbs that are imported.

Furthermore, I want to say that we, the representatives of the Department of Agriculture, stand in great danger of being discredited throughout the state from the fact that we told the farmers to go into this business and that they were going to be protected. I am sorry that I have to leave tonight, but I have two of my staff here and they will be here tomorrow and glad to answer any questions you see fit to ask them.

Assistant Secretary Dunlap: I understand that Congressman Hayden wishes to file a telegram. The Chair will recognize him for that purpose.

Congressman Hayden: I would like to enter an appearance and file a statement in behalf of my State Commission of Horticulture, the State of Arizona.

(The telegram above referred to was addressed to Honorable Carl Hayden under date of November 14th and signed by the Arizona Commission of Agriculture, reading as follows:)

. "Committee Western States Agricultural Representatives in Washington to support Federal Horticultural Board November sixteenth meeting against destructive opposition recently manifested Also to aid in suppressing any action on part of opposition to





weaken provisions plant quarantine act Request you attend meeting give full support to action Federal Horticultural Board."

Mr. A. H. White: Mr. Secretary, some of the ladies have not had a chance to speak.

Assistant Secretary Dunlap: We must conduct this conference in some way so that we may get through with this meeting by midnight tomorrow night.

Dr. Randall: I make a motion, Mr. Secretary, that we adjourn until 9 o'clock tomorrow.

A Speaker: I second the motion.

Assistant Secretary Dunlap: The motion has been made and seconded that we adjourn until 9 o'clock tomorrow. All those in favor will please say Aye and those opposed No.

(The vote was taken.)

The motion is unanimously carried.

(At this point, 4:30 o'clock p. m., an adjournment was taken until 9 o'clock of the following day.)



CONFERENCE REGARDING RESTRICTIONS ON  
IMPORTATION OF NARCISSUS AND CERTAIN  
OTHER BULBS

Before United States Department of  
Agriculture.

Washington, D. C., (New National  
Museum) November 16 and 17, 1925.

(Vol. I, pp. 1-228, Nov. 16, 1925; and  
Vol. II, pp. 229-434, Nov. 17, 1925)

V O L U M E II.





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The Conference met, pursuant to adjournment, at 9 o'clock a. m., November 17, 1925.

Assistant Secretary Dunlap: The Chair is in doubt as to whether or not those people who are opposed to the quarantine have completed their statements. If there are no others to speak against the quarantine the folks who will talk for it will now have the opportunity. However, I wish to make this statement in the beginning. I want to thank those who are in favor of the quarantine for the very fine attention they gave to those who are opposed to it and I trust that those who are opposed to the quarantine will give the other side equally as courteous treatment.

Dr. Marlatt wishes me to call your attention to the fact that it will not be possible for the government to print, without action of Congress, all this mass of material, which will mean two or three or four volumes, but that the matter will be, perhaps, presented or put in an abbreviated form. It will not be possible, we are quite certain, to have all the material here presented printed.

Now, the Chair will recognize Mr. A. M. White.

Mr. A. M. White: Mr. Secretary, ladies and gentlemen, I will try to make a very brief presentation. I believe that the general statement which I will present and the ten or twelve speakers whom we shall call upon can cover our matter in close to two



hours. We shall try not to introduce unnecessary matter and we will be very glad after adjournment to get together with the other side in friendly conference to straighten out any tangles that may exist.

I represent the American Bulb Growers Committee of about 70 firms of individuals spread along both the Atlantic and Pacific coasts, with some located near the Great Lakes and in Texas. This committee was hastily formed, after the public announcement of this hearing, in order to present to the Secretary of Agriculture its protest against any modification at this time in the provisions of quarantine No. 37, especially as regards narcissus bulbs.

The main reason for this protest against any present change in the long-advertised policy of your department lies in the uncertainty as to the sufficient immunity from plant disease of bulbs grown in Holland and France for export to the United States. Until the cleanliness of foreign narcissus with respect to the safety of agriculture and horticulture in this country is more definitely assured we contend that it is folly to run unnecessary risks regardless of the efficiency claimed for Holland inspection and the value of certificates of their inspecting services, the fact remains that serious complaint has been made during the past season with respect to Dutch shipment to this country and to England and also sufficient admissions were made yesterday by Mr.





Vogelsang of California with respect to the infestation which crept through under the forced draught of an intensive selling campaign and due also to unfavorable climatic conditions in Holland.

I know something about inspection. It is all very well to say it is efficient, but suppose that we get another insect like the Japanese beetle or another disease like the white pine blister rust. Then, no matter how good the inspection is, who is going to pay for the loss? These foreign countries that are shipping these things to us are not under bond. You cannot insure the safety of these things. Suppose that we had another disease like the white pine blister rust. Some of my friends from the Northwest might be able to estimate as to how many millions of dollars they have lost through that disease. That is why we have got to go carefully and that is why we are making that point. I do not think it is generally borne in mind.

I understand that the present opposition to quarantine No. 37 regarding narcissus may be divided into several heads.

Under the first head comes the injury to the business of ~~foreign~~ foreign growers and their importers here.

The second point is the decrease in business of jobbers, seedsmen and some florists.

The third point is in connection with the lack of supply,



both of bulbs and flowers, for the ultimate consumer, because of the lack of an adequate supply of American grown bulbs of quality.

The fourth point is in connection with the danger of ill will and retaliatory measures by foreign nations whose citizens would be injured financially.

As to No. 1, namely, the injury to the business of foreign growers and their importers here, I have here in my hand a pamphlet which I am filing with the Department of Agriculture here, but which it is not necessary to place in the record. I will be very glad to have any one look over these matters which I have here. This pamphlet will be ~~filed~~ by me in the section covering clippings, photographs and pamphlets. Instead of reading the letter I am going to give just the gist of it. I think Mr. McHutchison used words something like this: "As to foreign growers and importers in this country, they will suffer only temporarily because they will adjust themselves to the situation over there." I think that is about the wording in the pamphlet. If that is not correct, Mr. McHutchison will kindly correct me. That is directly connected with the so-called threat of retaliation by foreign countries because, as Mr. McHutchison states, the loss is not so great. I think this threatened retaliation is more or less of a bogey man that has been conjured up.





As to No. 2, the wholesale and retail distribution, they have no fixed investment of capital, but enjoy a trading privilege based on long terms of credit, and, anyway, narcissus is but one of very many items handled by them. Furthermore, if the American supply will be as we believe, and if they will cooperate instead of obstruct, these marketing concerns will find that their fears have little foundation. We are all friendly, of course, It is only natural that we should differ on these matters. When it comes right down to it, this is a fight about money. It is a question as to who will have the business. That is what it comes down to, after all.

As to the American supply, the third point, you will shortly hear the results of a census recently computed which we believe states the condition in moderate terms. I mentioned before this matter of retaliatory measures. I think that side has been worked up somewhat. I think if you will look into the matter more thoroughly you will find that there are many different varieties of plants that have some measure of embargo against them by foreign countries. There is the record. I would be very glad to have you look it over.

Besides the main consideration of plant disease, there is a secondary consideration of justice to American growers. They have, under the virtual solicitation and encouragement of their govern-



ment, through its Department of Agriculture, made heavy investments in planting stocks, land, buildings, equipment, labor and necessary overhead to develop an American supply of narcissus. It makes no difference if someone calls the government inconsistent for postponing the restrictions for three years. Such was the government's action and the business commitment of these growers resulted directly from that action.

They have been subjected to discouragement and hindrance, hostile criticism and unfair attacks, in addition to the natural hazards of a business of this sort. But "their heads though bloody are unbowed", and they come here today, alongside of representatives of farming organizations and state boards of agriculture, the National Grange and the farm bureaus and county agents of this country, represented by communications filed with the Department, to speak as to matters which have been put forward by the opponents of quarantine No. 37.

I will call on ten or twelve of these men, representing the principal states in which narcissus growing has been established. I will then call on Dr. Thomas J. Headlee, entomologist of the State of New Jersey, Mr. Howard B. Hancock, members of the farm bureaus, and one or two Congressmen instructed by their constituents, and then our case will be closed. I think we will be about two hours or two and one-half hours, if the whistle blows then.



You must excuse me if I speak rather informally. You can write about five thousand pages in discussing these matters. I am going to put it informally.

We must first refer to the wrong picture created for these women by the propaganda resulting from the foreign growers and their agents in this country. I am a member of the Horticultural Society of New York but I never received a poll as to their stand. Of course, the directors generally run those things. I am also a member of the Brooklyn Botanic Garden. I do not think they have taken any vote on the subject. A great deal has been said about the inferiority of American grown bulbs. Every one of your growers has had some experience of that kind with bulbs when they are shipped. There may be trouble anywhere along the line. There may be trouble with the railroad and with the storage. I am stating that just in general, because I think some of the women present do not understand those things. They have listened to the side of the opposition and some of them have gone away without hearing our side.

I know almost as much about bulbs as Mr. Vogelsang does, and I know more about apples. I am an apple man. Mr. Vogelsang, we think eastern apples beat your western apples all to pieces in general.

What has been this information which has reached these ulti





mate consumers, the ladies? There has been a campaign started, originated by the foreign growers, because they thought they were going to lose business. That is perfectly natural. The first train they turned to was the import agent in this country. Then the obvious train was to the distributing men. Then, naturally, it went to the magazines, in which these men advertised. It went to the Florists' Exchange, the Garden Review, and several others. It then naturally reached the garden clubs, the National Garden Association. The members of these garden clubs naturally got their information from the matter prepared and distributed by these interested parties. There is always a danger in preparing matters of that sort. In the first place, you have to have money to prepare these things and you have to have money for traveling expenses. You have to write articles and you have to pay printers' bills, etc. Money was raised. It was raised by whom? By the foreign growers. Some was raised by your firms in the trade. Some was raised by enthusiastic amateurs. I only know from my experience with charitable organization campaigns in the past, there must have been spent considerably in excess of a few hundred dollars on that campaign. (Laughter on the part of the opponents.) I have not got any statistics but I would not undertake to underwrite such a campaign for less than about \$75,000. (Laughter by the opponents.) I evidently have understated it. (More Laughter.)



I heard a gentleman hiss over there. That is hardly fair.

This is really said in good nature. You may think that I am trying to make fun with you. I am honest. I am only saying that it gives a misleading picture.

The other day I was discussing this matter with a friend of mine in New York who is one of the best economists I know of. After we had talked the matter over he told me, "You are absolutely right in the stand you have taken in regard to this plant disease." In my own family we had a difference of opinion about this and it is getting to be a hornets' nest. I can hardly go home at night. I said I would rather stay away until this hearing was settled. Everybody gets so worked up over these things, so tense. Next Thursday I will have the pleasure of meeting the president of the National Woman's Garden Association. I think I will feel a little freer about talking to them after we get through here.

Now I am serious about these matters, but I think sometimes we can get along a little better if we inject a little humor into the situation. Here is a sheet which was prepared by one of the gentlemen, I suppose, employed to get up material. I do not think I met him. I want to meet him. I think he is associated with Vaughan's Seed Store which has a national garden bureau which supplies articles to the papers in connection with useful garden matter, and I think it is the American Seed Trade Association.





I think that is the name. Mr. Burdett is a very prolific writer.

Here is sheet No. 1, entitled, "Campaign against Bureaucracy."

This is sent to various newspapers throughout the country and these various articles are headed, "Release August 10," "Release August 17," and so forth. Then here is one that is addressed to the editor which is entitled, "The Narcissus vs. the Onion".

Then there is an item headed, "Narcissus vs. Onion," Issue in Big Fight." Then there is a heading, "Bulb Embargo will bring Trade War." Then there is another heading here, "Bulb Embargo

held Illegal on Three Points." Here is still another one,

"Marlatt Bars Narcissi as not Essential." Here is still another heading, "Embargo Deals Paralyzing Blow to Gardeners." I will also read this heading, "Gardeners ask for Food for the Soul.

Marlatt hands them an onion." (Laughter from both sides.)

I do not know whether it is in order to ask Dr. Marlatt to be expelled from the room, but let us permit him to remain for a few moments, no matter how miserable his soul is. I really think it will do him good. When you read an article like, "The Narcissus vs. the Onion," and when you read a gifted editorial in the Times on the Narcissus Fly by Frank M unsey, you can just bet that he did not write it, but that it came to him skilfully prepared.

That is how the women got their points of view, and from the Washington Star. I read another item by Mr. Burdett. I hope we can



have his services if we can make proper salary adjustment, to help us sell our goods. I am going to counsel just a little soft-pedaling and a little less of the highfaluting language. These are the things which have created this public opinion. Perhaps some of you are acquainted with a New Yorker who invented the phrase "political acceleration of public ~~opinion~~<sup>been</sup>." I think there has a little of that acceleration used by Mr. Burdett. Mr. Burdett says that the next big political issue in our country is going to be Bureaucracy.

This editorial entitled, "The Narcissus vs. the Onion," reads as follows:

# "THE NARCISSUS VS. THE ONION

## A BIG FIGHT AND A GOOD STORY

To Editors:

"The next big political issue in our country is going to be Bureaucracy! In our federal government, power has been for years gradually diverted from the elected representatives of the people to permanent civil service employes, protected in life jobs, many of whom have been delegated powers by law which they themselves drew up and put through congress without their real effect being foreseen.

"Given a little authority, bureaucrats always expand it, until in a hundred cases they are wielding power such as no



elected officers in our land -- city, state or nation -- would dare assert. Congressmen for some time have realized the situation.

"A reaction has come and a determined campaign is to be made against bureaucracy. There is no doubt of the outcome of this fight, once the people understand it. For the most part these bureaucrats come in contact only with business. It is difficult to find examples of their methods which touch the life of the people

#### "THE PERFECT EXAMPLE

"But there is one example, a perfect one -- The Federal Horticultural Board.

"In the beginning, its growth, its methods, its attitude, its arrogance, its favoritism, and its complete domination by one man (a consummate politician), this board is typical of the New Tyranny. It is composed of five employes of the department of agriculture of whom you have never heard. You will be amazed when I tell you what this board can do.

"It can declare an embargo tomorrow against bananas coming into the United States, and deprive the people of this great source of food, and of all other imported fruits.

"It can shut off importations of field, vegetable and flower seeds, regardless of their importance to the commerce or agriculture of our country.

"It has shut off imports of trees, shrubs, roses and other





plants for resale to the people of this country, depriving them of the newer varieties developed in foreign lands and forcing upward, sometimes doubling the prices of similar merchandise produced at home.

"And having forbidden the free entry of such things, it can and does give to whom it pleases, permits to import the forbidden goods, thus enabling the fortunate recipient of its favors to build up a profitable business in embargoed goods.

"The transactions of this board are not public; its records are kept secret. No regulations binding on the board govern its issuance of permits. Before it, the citizens of this country are not equal. One can receive what another is denied.

#### "THE NARCISSUS EMBARGO

"Three years ago this board, without a hearing, decreed that after January 1, 1926, no more narcissus bulbs could be imported into this country for resale.

"Narcissi are chiefly grown for flowers in winter. Eighty per cent of the 100,000,000 imported last year were forced in greenhouses, or in bowls of water on living room tables. The excuse given for forbidding their import after January 1, is that they bring in eel worms which may injure the onion crop! Greenhouse onions, no doubt.

"The Narcissus embargo has brought to a head the fight on



the board's arrogance which has been brewing for six years. It offers a colorful example of dictatorship by bureaus. Important in itself, since it destroys an annual commerce of \$5,000,000 and invites international reprisals affecting many more millions, it acquires vastly greater interest because it reflects the greater fight which must be made and won, the fight against Bureaucracy! Between now and January 1, we shall hear much of the narcissus and Quarantine 37. The stories on this sheet will place you and your readers in possession of the facts alleged by the opponents of the embargo.

#### "THE NARCISSUS VS. THE ONION

"Here is a good fight. It makes a good story. It has drama, humor and real importance. The stories on this sheet have been prepared with reader-interest in mind. They not only present amazing facts in an authentic manner (I offer legal proof of every statement made), but they are written just as you would have your feature writers dress up the facts to make a good hot weather yarn. There are two sides to all stories, of course, but our side is new to the public; it has never been fully told. The Federal Horticultural Board has told the other side.

"I would much appreciate copies of your paper in which this material is used. Please observe the release dates, for the protection of all; and write me if you want any obscure points cleared





I think this whole thing, however, is a little clumsy.

I believe that if I were at the back of that I would have used a little more finesse about it.

Mr. Vogelsang: You did run one, didn't you?

Mr. A. M. White: I told you that ---

Mr. Vogelsang (Interrupting): I withdraw that question.

Mr. A. M. White: You and I are going to have a lot of fun before we get through. (Laughter by proponents.) The ball is in the middle of the field and you will not know when we are going to make a forward pass. I want to say that there has been an acceleration of public opinion. They have been misled as to the condition shown here on the screen and of which we have every evidence. I will show that they are in entire ignorance of the American growing of Narcissus bulbs and so are a lot of other people. We are not going to claim anything that we cannot back up. If we make any misstatements we want to be corrected right here. We are for American growers before foreign growers.

(Applause by proponents.) Furthermore, we contend that it is the function of the Department of Agriculture to consider first the interests of American agriculture, of course, with friendship to sister nations. But, first of all, that is their job, that is what they are here for, to protect American agriculture.

In regard to retaliation, Mr. Vogelsang, may I ask, do you



represent the horticultural society? You seem to be the sort of whip of your side, as I was asked to be of mine.

Mr. Vogelsang: I am retained as an attorney by the American Bulb Dealers' Association of New York.

Mr. A. M. White: Thank you very much.

Mr. Vogelsang: I am sorry that I did not know about that \$75,000. (Laughter on the part of the opponents.)

Mr. A. M. White: You are to be envied. You have at any rate got a hope. I have no hope of any reward. I am not an attorney. All that I have got is in farming. We have no lawyer. I do not mean by that, of course, that it is any reflection to have one. We are dirt farmers.

Mr. Vogelsang: I will swap my office for your dirt farm any day in the week.

Mr. A. M. White: I should think you would. You have not seen it.

Are you acquainted with Mr. H. A. van Torchiana, consul general of the Netherlands in San Francisco?

Mr. Vogelsang: Yes, I know him very intimately.

Mr. A. M. White: Do you know Mr. C. W. Birdson of Seattle?

Mr. Vogelsang: I don't know.

Mr. A. M. White: Birdson, I think it is.

Mr. Vogelsang: I think it is Birdson.



Mr. A. M. White: I just wanted to speak of that in connection with this subject of retaliation. If I am wrong, please correct me. Among the propaganda was a pamphlet entitled, "A Constructive Criticism of the Policies Governing the Establishment and Administration of Quarantines against Horticultural Products."

Chapter 4 of this pamphlet states, "Does the Federal Horticultural Board's policy pay? Nations cannot play solitaire --- the passport predicament --- scientific solitude equally impracticable --- American exports in danger --- where will our farm crop surplus go? --- why sacrifice a going business to stimulate a smaller, weaker one? --- the larger view of world trade --- will the policy of isolationism pay?" It seems to me that there is a veiled threat in there, that we will have retaliation. That is sponsored by four organizations. I sent out a report for the purpose of finding out about the Northwest Fruit Growers' Association through the Federated Fruit and Vegetable Growers Incorporated. I asked for a trade report. I learned that Bordson is a young attorney, 32 years of age and that the so-called Northwest Fruit Growers were not known in the fruit trade, that the association had perhaps about 1500 acres connected with it and that Bordson's chief activities seemed to be to link up with the Dutch interests on apple orchards, that is, Dutch mortgage companies. I presume that means Dutch companies who have mortgages on apple orchards and





fear that retaliation against northwest apples would injure the value of their mortgages. That is the report that I get. I know people in the Federated and I think it is reasonable. I am further informed that that committee is a paper committee. I do not think it is right for people to get <sup>in-</sup>to the public press as the Northwest fruit growers when they do not <sup>represent</sup> ~~present~~ the Northwest apple growers at all. We have representatives here from the Northwest. I can assure you that is purely a paper committee. It gives the impression, however, that it represents the Northwest apple growers. When you consider the extent of the apple-growing interests behind this pamphlet, I do not think that it is quite fair. I am told that the principal author of this article or one of the authors was Mr. Van Torchiana, consul general of the Netherlands. Of course, any consul general is going to further the interests of his country, as much as possible. When you read such statements as there are contained in chapter 4 of this pamphlet with regard to retaliation and so forth, you must consider who is behind these statements. Mr. Burdett was on the committee and said he ~~saw~~ <sup>gave</sup> the proof before it was sent out. I think he was misled. I think Mr. Burdett and the Florists' Exchange were both misled.

Mr. Vogelsang: You may as well also say, Mr. White, that while Mr. van Torchiana is consul general of the Netherlands on



the Pacific Coast, he is also an American citizen of 35 years standing and that his allegiance is to the flag over there (The speaker then indicated the American flag) and none other.

Mr. A. M. White: Good for him.

Congressman Free: I want to give some information.

Assistant Secretary Dunlap: If it is in favor of the quarantine we will have it. However, Mr. A. M. White has the floor.

Mr. A. M. White: Even though he is an American citizen, that does not alter the fact that he is representing the Netherlands government.

Mr. Vogelsang: But when you say "his country", I want the people here to understand that his country is the United States.

Mr. A. M. White: I correct myself immediately, thank you. I thank you for calling my attention to it. At the same time, I wish to say that even though a man is an American citizen, if at the same time his interests are linked up with foreign interests, that is a consideration that should not be lost sight of. It is not a vital thing, but it is worth while to bear it in mind when you read what he has said. The committee of the Northwest fruit growers is a paper committee. I think you ought to know who the endorsers of that committee are. If Mr. Torchiana is an American citizen, of course, he has a <sup>perfect</sup> right ---

Mr. Vogelsang(Interrupting): He is that and an attorney at





law as well.

Mr. White: I envy him. The practice of law is not nearly as risky as farming.

Mr. Vogelsang: I am not so sure about that.

Mr. A. M. White: I will say just a few words as to that pamphlet and as to the other several smaller leaflets printed. They are, generally, all right, except there is an awful lot of language in them and there are very few facts. There are not many concrete instances. I do not think that all of you have seen them. They create the impression of this thing which is all one-sided. It would take entirely too long to go through all of this material. Mr. McHutchison said something about the damage to foreign interests if the restriction continues. There are several things ---

Mr. Vogelsang (Interrupting): Will the gentleman submit to a question?

Mr. A. M. White: All right.

Mr. Vogelsang: You have referred to the endorsement of the Northwest Fruit Growers' Association, but there are three others of which you have said nothing. Why not name those?

Mr. A. M. White: All right. One is a committee headed by Mr. McFarland. Then there is the Garden Magazine. I differ with Mr. Burdett as to his endorsement of what is in that pamphlet. I do not believe that all of your associates, Mr. Vogelsang, would



agree with the things said in that pamphlet. I should like to meet you gentlemen at luncheon any day next week and talk it over. The Florists' Exchange which is one of the two leading papers in the trade is thoroughly familiar with the business but is distinctly on the side of the opposition. We will assume that they believe in it entirely. That is where their interest lies. I am not questioning what they say or believe, as to their honesty of purpose. They carry a great deal of advertising matter, of course, and naturally their interest is in that side. On the other hand, the growers in this country do not advertise. The advertising is done mostly by the foreign<sup>cien</sup> growers. Of course, anybody would admit that without advertisements a paper would not be able to pay for itself. I believe that is a perfectly fair statement.

Mr. Vogelsang: I think that if the advertising patronage were withdrawn from papers there would be a great paucity of news in the country.

Mr. A. H. White: Thank goodness, I wish that were so. Well, we can agree on that. Mr. Vogelsang, have I dealt sufficiently fairly with the other endorsements?

Mr. Vogelsang: You have named them. I only thought that it was proper that they should be mentioned, because you pick out one and omitted the other.



Mr. A. M. White: I omitted the bad ones. There was only 25 per cent infestation there, Mr. Vogelsang. You will excuse the informality. I have only a little more and then I will be ready with my speakers.

We insist that investigation must precede postponement and that postponement should not precede investigation. If there were potential danger to a human being from disease I do not think that is the way to treat such a patient. You would not do that with a member of your own family. If a child had the fever you would put him to bed, naturally. I think the suggestion of postponement and then investigation violates every principle of health. I will call in all of the staff of Johns Hopkins if you want me to, to back me up on that statement. You would not treat your family that way, why treat the poor harmless bulbs that way? (Laughter by the opponents.) I make that as a serious point, although we have got to have a little fun, for we are away from home and we are working without a salary like Mr. Vogelsang --- (Laughter)

A Speaker: Is this a Will Rogers sketch, or is it a conference on bulbs? I do not think we are interested in this jocularity.

Assistant Secretary Dunlap: The gentleman yesterday, as I recall, were not interrupted in their presentation of their





side of the case. I hope the gentlemen today will not be interrupted either. We will proceed. (Applause on the part of proponents.)

Mr. A. M. White: Mr. William Rogers will close in about three minutes.

A Speaker: You have missed your vocation.

Mr. A. H. White: I wish to speak now of the supply. I think it is generally admitted that there has been, we will say, an over-stimulated market in narcissus bulbs this last year. That is only natural, because this quarantine and these restrictions were advertised and the people were told that they would not be able to get their bulbs and the advertisements in all the trade papers and catalogs stated, "You must buy now, because after January 1 you will not be able to get them; the supply is uncertain." Naturally, the wholesalers, dealers, jobbers, and retailers sold very heavily. The sales, I believe, this last year were very considerably in excess of what they had been before. I think that is admitted, Mr. Vogelsang, is it not?

Mr. Vogelsang: I have heard so. I have no doubt that it is true from the reports which have come to me.

Mr. A. H. White: I think we can assume that. In other words, I think the people bought their supply for one or two years ---



Mr. Vogelsang (Interposing): For planting stock for the American dealers?

Mr. A. H. White: I am speaking of any one who bought ten or fifteen thousand or twenty thousand narcissus, bought them so that they would have them on hand. They won't buy them next year under that same stimulus.

Mr. Vogelsang: Are you sure they won't buy them?

Mr. A. H. White: Of course, there is nothing sure but taxes and death.

Mr. Vogelsang: You said that they would not buy them.

Mr. A. H. White: I said what was told to these customers by the dealers. At any rate, I will say it now, because it is a good point. They told their customers to buy this year, that they could not get them next year. Having over-sold the market, they wish to postpone the restriction, under the threat of which they over-sold the market. Is that not plain, Mr. Vogelsang?

Mr. Vogelsang: It is plain enough, but it is not the fact.

Assistant Secretary Dunlap: I think we will have to observe parliamentary rules or the reporter will not be able to get the hearing. Hereafter, those who wish to interrupt the speaker will rise in their places and ask the speaker <sup>he will</sup> if/yield to a question. If the speaker yields the question may be asked, otherwise we will go on with the hearing, with the gentleman who





~~have the~~ floor. This rule will be absolutely adhered to from now on. (Applause from both sides.)

Mr. A. M. White: I do not think it is necessary for most of us business men to argue about the effect of an intensive campaign. Everybody knows, from common experience, that that would naturally result in the placing of very heavy orders which otherwise would not be placed.

I will not refer here to the brief of October 10 filed by the seedsmen. I think it is mostly assertions. Two points. I agree on one point, and that is with respect to the American bulb growing industry being in its infancy. The other is as to the inconsistency, or whatever you wish to call it, in leaving the matter open for three years, that it should have been clamped down sooner. I admit that it is inconsistent. I think if I could sit down with you and go over these points I could show you that all of the other ones are incorrect.

Relative to general farming prosperity, that is a matter which will be dealt with later. You have got to keep that in mind, of course. If you have the requisite skill and experience in bulb growing in various sections of this country, bulb growing is one of the most valuable diversifications from other crops. You are American citizens. You know the serious things that American farmers have to contend with. That is a point to be



borne in mind. It has nothing to do, of course, at this moment with the question of infestation. I do not know whether infestation comes to New York or whether it gets to crops in the country. I only know that there has not been full proof established on either side. I do not think that the witnesses yesterday, the private gardeners, who were asked how long they were in business, and so forth, gave us any valuable information. I do not think that their answers help us unless we could get a lot of them together. I can put four or five men on the stand and ask them if there is anything the matter with this and with that, but after all it is like the story I believe we have all heard. You remember, no doubt, the story about the witnesses who had seen Pat Kelly steal Mrs. Casey's pig. The prosecution went on and put several witnesses on the stand who testified that they saw Pat steal the pig. Then, the attorney for the defendant put six or seven witnesses on the stand who testified that they did not see him steal Mrs. Casey's pig. There was a good deal of that in the testimony which was given by those witnesses put on the stand by Mr. Vogel-sang yesterday.

I am not making any specific charges against any specific shipments of foreign bulbs. However, in a Holland paper, printed in Dutch, which I have here, which any of you can read, if you want to, there is an account of quite a serious complaint on the



part of the British with respect to Dutch bulbs, in spite of the usual Dutch certificates. In fact, out of a shipment of two and one-half <sup>Dutch</sup> tons of bulbs, sent into England, of that amount only about 25 per cent were saved. What the infection was I do not know. As a matter of fact, when you look into the matter, you may find that it was disproved. However, that is one of the matters you must pay attention to if you are in business. I have the original Dutch paper here containing the account of this article, which any of you are at liberty to look at.

There are a great many other things which I would like to mention, but lack of time will prohibit me from doing so. I will proceed at once to ask for the speakers.

Mrs. Pratt: May I ask a question?

Assistant Secretary Dunlap: Does the gentleman yield?

Mr. A. L. White: Yes.

Mrs. Pratt: I understand, that you say that you think the women only get their information from magazines and do their thinking through boards of directors ---

Mr. A. L. White: I mean, in regard to this particular point.

Mrs. Pratt: May I ask you, what higher authority do we have than Dr. Marlatt?

Mr. A. L. White: It seems evident, that you have not any knowledge of American growing of bulbs at the present time?





Mrs. Pratt: I spoke of the danger of the pests brought in by European bulbs. I confined my remarks to the danger to American horticulture and agriculture, which I understand was the point of this meeting, and not the question of the availability of American grown bulbs.

Mr. A. M. White: I was not referring particularly to your remarks but to one or more of the several other women speakers. There were some remarks made as to where the women would get their bulbs in the future, that they would not be able to get narcissus.

Mrs. Pratt: They would not get them, except at a much greater price.

Mr. A. M. White: That is the point on which I think you have been misinformed. I do not see why the prices should be much higher, especially, when you take into consideration the over-stimulated buying which has been done due to the threat of embargo.

Mrs. Pratt: That is a matter of commercial knowledge.

Mr. A. M. White: Exactly.

Mrs. Pratt: That has nothing to do with the basic subject at hand.

Mr. A. M. White: I beg your pardon. It seems to me that the women have been of the opinion that in the future they are not going to get their bulbs. That is part of the question. That is one of the arguments advanced.



Mrs. Pratt: It is not the basic argument.

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Mr. A. H. White: It is a factor, however, that although you have had statements from the Department of Agriculture, undoubtedly, you have received a great deal of this literature to which I have referred. Naturally you have your information from articles in the magazines and from your talk with dealers and the others.

Mrs. Pratt: I take exception to that, so far as the Garden Club of America is concerned.

Assistant Secretary Dunlap: I think we had better proceed.

Mr. McHutchison: Will Mr. White let me make an explanatory statement?

Mr. A. H. White: Some gentlemen are here from the far west, and I believe they should have an opportunity to speak. After they are through, I will stay here the whole week, if you wish.

Mr. McHutchison: You brought in so <sup>many</sup> matters, I would like to be allowed to explain them.

Assistant Secretary Dunlap: We will proceed with the hearing, and after these folks are through, any questions may be asked or any explanations made. We will never get through if we continue to interrupt the speakers the way we have done this morning. I hope the meeting will proceed without further interruption.

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before we adjourn.

We will first call on California, because they have several people who wish to present their views.

Mr. George C. Rooding: Mr. Chairman, I wish to say a word.

Assistant Secretary Dunlap: For what purpose?

Mr. Rooding: I just want to call on Mr. White to proceed with the program and allow California to go on later on.

Mr. A. M. White: I will then call on Mr. W. J. Guille, who is familiar with the question of supply, which will be the particular object of their remarks. In some places they may have something to say directly on the infestation.

Mr. Guille: Most of the opposition to the Narcissus embargo registered by the amateur growers through their garden clubs and other organizations, and the entire protest of the Society of American Florists, are based on the belief that we are to be deprived of these beautiful spring flowers or that our florists will have no bulbs next year. We have anticipated this angle.

Through a full survey of the present acreage we have been able to definitely locate plantings of over one hundred and thirty million bulbs, and with the sure knowledge that many growers and much acreage is either unknown or unreported to us (and this we estimate conservatively at twenty millions) a total planting therefore of one hundred and fifty million exists.



It is true that for perpetual planting only about forty per cent of this quantity could be released annually but much of the present acreage has been put out with the thought of marketing the first season, for the growers are aware of the liberal provisions of quarantine 37 that will enable them to make replacements or additional plantings under special permit until the available quantity is sufficient to take care of the full demand.

Our normal trading requirements are about seventy-seven million bulbs annually but this demand will likely be considerably smaller next season for many buyers have anticipated their requirements to the extent of two or three years. Also, the demand for bulbs from the florist trade will be smaller when the outdoor grown flowers are marketed and come in competition with flowers being produced by forcers.

There is, therefore, no sound basis for the belief that any acute shortage of bulbs in America is likely to develop. On the other hand the flowers will be available in greater quantities than heretofore, for in addition to the stocks produced by the forcers, there will be put on the market the product of these hundred and fifty million bulbs in the hands of producers and these outdoor grown flowers can be sold at most reasonable prices and thus increase the popularity of Narcissus and work to the advantage of the whole trade.





Far more important is the questioned ability of this country to propagate the bulbs and ultimately be able to take care of the full demand. The present cultures are spread over practically all of our water bound and many of the interior states and the fact that many of our best known bulb firms have seen fit to make liberal plantings over such a scattered area prompts the belief that the successful growing of these bulbs is possible in many sections, for the major plantings have been made only after careful tests or comparative observations carried on over several years. This diffusive culture precludes the possibility of a general crop failure and will be instrumental in shortly determining the most favorable section.

Practically all that the European growers know of Narcissus production is available for our use and the planting of much of our present acreage has been under the direct supervision of men long experienced in bulb culture in the old country and whose knowledge of the industry is, we believe, equal to the requirements.

Naturalized plantings of Narcissus are found in several sections of this country. Some of these date back to colonial days and the propagation shown is remarkable when it is considered that no cultivation or other attention has been given to them until recently. These plantings could not have persisted had the



damaging Narcissus pests have been generally prevalent over these areas.

The question of the forcing quality of these American grown bulbs is one of vital importance. It is acknowledged that if the bulbs can be grown successfully they will contain the flower buds in the embryo and it is equally true that under the right conditions these buds can be forced into bloom ahead of their normal time. Many trials have demonstrated conclusively that home grown bulbs will force from two to four weeks earlier than imported stocks of identical varieties. This advantage is a big one and most of the adverse reports can be attributed to the keen desire of the forcers to better this record. Most forcing failures with imported stocks can be directly traced to the damage sustained by the bulbs while on shipboard. In some seasons the loss thus occasioned has reached serious volume and a large percentage of this loss has been borne by the American forcers who have been unable to ascertain the damage until blooming time. This transportation damage risk will be largely eliminated with home grown stocks, which are being produced, in many instances, within a short distance of the consumers, permitting of earlier receipt and planting, which is the most important factor in early forcing.

It has been stated that forced bulbs are destroyed, but is it not a fact that they are thrown into refuse piles or more generally on compost heaps where every advantage exists for the





propagation of insect pests and diseases and their rapid spread made possible by the re-use of this compost in the potting up other plants subsequently shipped generally throughout the country I have been in close contact with many commercial bulb forcers for the past fifteen years and know of no single instance where the bulbs were destroyed.

Dr. Griffith in his Narcissus Bulletin shows the possibility of rehabilitation of forced bulbs and many growers now plant them out in the fields and our trade papers carry offers of forced bulbs for this purpose.

Mr. A. M. White: I will now call on Mr. Van Bourgondien.

Mr. Van Bourgondien: CONTROL OF DISEASES AND INSECT PESTS is the main issue. We are aware through the information received in the Federal Horticultural Board Bulletin that numerous diseases and insects dangerous to Horticulture, Agriculture and Forestry have been imported. Through the cooperation of the Department of Agriculture and close inspection of the Narcissus Nurseries here, and the issuing of Inspection Certificates to Narcissus Nurseries found clean, the spreading of any insect or disease will be practically eliminated. Several growers in this country have imported and set up at great expenses complete sterilizing apparatus to destroy any disease or insect found in Narcissus bulbs during the growing period in the Spring, thereby preventing the distribu-



tion or planting of any infested bulbs. We are fairly sure that large quantities of clean and healthy bulbs have been shipped from Holland, but through the piling up of the Narcissus crates in the steamers and on the docks, infested soil has fallen from unclean and unhealthy stock and infested all alike.

CAN NARCISSUS BE GROWN IN THIS COUNTRY has been the main question asked by many, and this can be answered in the affirmative through the four years experience of commercial growing by Van Bourgondien Brothers of Babylon, Long Island, New York. During these four years numerous Holland growers have visited Van Bourgondien Brothers' Nurseries and have expressed themselves favorably about the crop obtained, with the result that several large and influential growers have bought or rented acreage in Babylon and have now large plantings of Narcissus. Numerous growers in Washington, Oregon and Michigan have had the same favorable results in the past years. On account of the very considerable capital invested, practically all Narcissus Nurseries in this country are conducted and managed by experienced growers.

THE FORCING QUALITY of these American grown bulbs has been tested by different forcers of Narcissus bulbs with excellent results.

THE AVAILABILITY OF STOCK in this country is another important matter, and a list of growers and the approximate quantity



of their plantings has been compiled and is attached hereto. At least twenty-five growers with influential quantities are missing on this list, as they have not responded to the inquiry sent them, and several who are not in favor of Quarantine 37, owing to major interests abroad have not been approached for their acreage at all. However voluntary information over the grower's own signature gives us the fact that over seventy-five million Narcissus have been planted this year, and conservatively estimated quantity not reported twenty-five million.

THE QUANTITY OF NARCISSUS IMPORTED IN NORMAL YEARS estimated by such a society as the Albany New York Florists Club and possibly others, amounts to one hundred million Narcissus. Out of a quantity of one hundred million Narcissus grown in this country not more than thirty to forty million Narcissus bulbs will enter commercial channels. In Holland flowers of Narcissus are left on the plant or picked for destruction. In this country the major portion of Narcissus flowers will be picked for the various flower markets in the U. S. A. Therefore, although fewer bulbs available, there will be an ample supply of outdoor grown Narcissus flowers in the early Spring, with the result that a larger number of people with moderate means will be in a position to buy these cheap outdoor grown flowers than ever before. Therefore a considerable smaller quantity of saleable size commercial bulbs will not reduce





the quantity of cut flowers available as much as might be expected, if at all.

PROFITEERING or such like will be taken care of by the law of supply and demand. While the prices of bulbs may increase, as did the prices of Gladiolus, Dahlias and Evergreens in 1919 practically two or three years of extensive propagation and moderate sales will adjust conditions to very near normal and outdoor cheap flowers will compensate for smaller supply of bulbs for a few years.

Mr. A. H. White: I will now ask Mr. Overdevest to address us

Mr. C. J. Overdevest: I represent the Del-Bay Farms of Bridgeton, N. J., where I have charge of bulb production.

Encouraged by Quarantine No. 37 this company is now engaged in the growing of bulbs to the extent of over 40 acres of Daffodils and over 60 acres of other bulbs, representing an investment of over a half million dollars.

I have grown up in the bulb industry in Holland, having had 12 years' of actual growing experience, and my father having had over 40 years' experience in this business. We have had good success in growing bulbs in Holland.

After careful studies of growing daffodils in the United States and especially during the last eight months at the Del-Bay Farms, I am convinced that we have the soil and climate to success-



fully produce high grade Daffodil Bulbs for the American market.

Although I do not claim to know all there is to know about the bulb production business, I feel that I am better qualified than anyone to express technical knowledge of bulb production at Del-Bay Farms and further, I feel qualified to state that with the protection of Quarantine No. 37 to keep out diseases and insects, we can and will supply the American market with bulbs equal to those produced in Holland.

Mr. A. M. White: We will now hear from Mr. W. C. Weiss.

Mr. W. C. Weiss: I have been requested by the American bulb growers of Tidewater, Va., to come before you and state a few facts in defense of Quarantine 37, not to make a speech, for I am no orator; I am a bulb grower. I have grown up in the bulb business from a child, and have been commercially engaged in the propagation of narcissus bulbs for 14 years. On my farm near Portsmouth, Va., I have a planting of ten million narcissus. I am president of the Weiss Baker Bulb Farm near Richmond, Va., whose plantings consist of about 1,000,000 narcissus. I am president of the Tidewater Bulb Corporation who have a planting of 1,000,000 narcissus near New Bern, N. C.

I have a planting at Horatio, S. C., of one-half a million narcissus.

I was president and founder of the Sunray Bulb Farm





near Savannah, Ga., whose plantings of narcissus amounted to about 1,000,000 bulbs.

All of the bulbs which I used in making the plantings which I have mentioned are absolutely free from all disease or insect pests.

These bulbs came originally from England, about 20 years ago, and have been propagated in the United States ever since.

These bulbs were free from disease when they were imported from England and they are still free from disease as they have never come in contact with diseased bulbs.

I accompanied Mr. Liegel of the Agricultural Department to the various bulb farms in Tidewater, Va.

His reports on the various plantings show, as he told you in his yesterday morning's address, that the only bulbs which showed disease were bulbs which had been recently imported from Holland.

I wish every one here could have seen a lot of narcissus, 15,000 to be exact, which W. W. Forehand received from Holland. They appeared to him to be O. K. for he knew no more about narcissus pests than do many who addressed you here yesterday. These bulbs were planted in the fall of 1924, and dug in the summer of 1925. Out of the 15,000 narcissus he planted there was not a bulb which was not infested. These bulbs were



to be grown for a seed house in Chicago who is opposing the enforcement of Quarantine 37. Mr. Wiegell of the Department of Agriculture can testify as to the condition of those bulbs.

We have in Tidewater, Va., about 35 million narcissus which are and always have been free from disease. Then why should the clean American bulbs be subjected to the danger of disease by allowing the Holland bulbs to come into the United States? These 35 million clean narcissus, which I have just mentioned, belong to American bulb growers who have requested me to speak for them at this meeting and urge the Department of Agriculture to enforce Quarantine 37 without any modification.

Mr. Richter of the Henry F. Michell Company of Philadelphia, in his address yesterday afternoon, gave the impression that all American grown narcissus were diseased, and would not flower satisfactorily. If that were the case why has his company purchased large quantities of American grown narcissus for the past two seasons to sell to their trade? There is a reason for the bulb dealer to oppose the enforcement of Quarantine 37, for when the American bulb grower starts selling bulbs he will sell direct to the consumer, and instead of the consumer having to pay more for his bulbs he will get them cheaper than he is now getting them.



If you would go to Norfolk or Portsmouth and tell the people that American grown narcissus will not bloom they would think you were crazy, for they see them in the spring blooming by the million.

I do not have to tell the people of Washington that American grown narcissus will bloom, for during March and April their city is full of yellow daffodils. In the show windows, in the florists' stores, in the homes, everywhere, are daffodils which remind us that spring has come. Where do they come from? Are they grown in the greenhouses, from Holland grown bulbs?

No! Go ask the wholesale dealer to show you the boxes that they were shipped to him in, and on 99 out of every 100 you will see W. C. Weiss Portsmouth, Va., printed on them. They are American-grown daffodils from American-grown bulbs.

The plantings which I have made in Virginia, North Carolina, South Carolina and Georgia have proved highly satisfactory.

We were urged by the Department of Agriculture to prepare for this quarantine, and were given three years to prepare in; and we have prepared.

We can take care of the American demand with clean, American-grown bulbs at a moderate cost.





In closing I wish to say that I am confident that the fate of Quarantine 37 is in the hands of gentlemen who are competent in every respect to handle it, gentlemen who have at their disposal information dealing with every phase of the question, and who, I am sure, will render a fair decision.



Mr. A. M. White: We will now hear from Mr. Buis.

Mr. P. Buis: The bulb growers of Southeastern North Carolina wish to express their grave concern over the possibility of the embargo (Quarantine No. 37, Federal Horticultural Board) on Narcissus and related bulbs being rescinded, and respectfully submit the following memorandum for your consideration:

Statement of Case.

Eastern North Carolina has long been known as a section well adapted to the production of bulbs. In the vicinity of Magnolia, Rose Hill and Wallace, N. C., there was at one time considerable acreage of Narcissus bulbs as well as other bulbous and tuberous flowering plants. The Narcissus industry died out as it could not compete with the foreign producers who were on better financial basis and able to produce bulbs more cheaply, principally on account of more favorable labor conditions. The section, however, continued to produce tube roses, Calladiums, and especially Cannas. It was the chief source of the world's supply of tube roses for many years and is today noted as a source of fine canna stock.

Approximately three years ago the Federal Horticultural Board announced, after full consideration in public hearings, an embargo on Narcissus bulbs, effective January 1st, 1926, the delayed date being set to permit the American growers to prepare





to take over the load of producing the needs of the American market and permit the American bulb dealers ample opportunity to readjust their business on an American basis.

Knowing that the U. S. Department of Agriculture is not disposed to take action of this nature without full consideration and trusting to the government to stand by its official decision, individuals in various parts of Eastern North Carolina, especially in the Wilmington Elizabeth City and New Bern districts purchased and planted bulbs with a view of having a saleable stock for the American market in 1926. Similar action was taken by growers all over the country with the result that extensive areas of bulbs ready for the American market are coming forward from Florida to the Puget Sound, and from Long Island and the Carolinas to California. It is a fact that we have in the United States today a great nation-wide bulb growing industry.

While the bulb producers have been endeavoring to uphold the decision of the U. S. Department of Agriculture, the importers of foreign bulbs and allied bulb dealers have not as a group taken advantage of the three year period which the Department allowed them. Having failed to cooperate and use the three year period for adjusting their business, they now ask you for a decision detrimental to American industry, and ruinous to the American bulb producer as a reward.



Arguments:

The embargo was originally established to protect American agriculture and bulb growing from the eel worm, Narcissus fly, lesser fly, and other pests causing damage in Holland and other foreign countries. The destructiveness of these pests, their presence on imported bulbs and their danger to America was fully established in the original hearing. The only question raised now is whether conditions at present are so changed as to alter the facts then established and warrant a reversal of the Department's decision. We contend that the embargo is as necessary today as it was three years ago, and that the present economic conditions would be so altered by an unexpected reversal of the embargo as to result in unjust and serious injury to the American producer.

A. The embargo had the effect of causing fully forty-five acres of Narcissus, representing an investment of over \$100,000 to be planted in the Wilmington section of North Carolina alone. Much of this planting was done by immigrants from Holland, experienced bulb growers, who after coming to this country had succeeded at truck crop farming to the extent of creating savings sufficient to invest in bulbs. These individuals are producing bulbs as fine as any they ever produced in Holland. The importers will claim that the foreign bulbs will force whereas American grown bulbs will not, but they can not convince these naturalized



immigrants from Holland of this. They know that they have today as fine a stock of Narcissus as the Holland growers send to America for forcing. They also know that the U. S. Department has itself been forcing successfully American grown bulbs for years. The statement that American bulbs will not force is propaganda emanating from interested sources antagonistic to the American industry.

B. It may be claimed that the imported bulbs are now free from pests which caused the embargo and that we may now safely import these bulbs. Such is not the case. The growers of bulbs in Southeastern North Carolina have this year submitted their new importation to inspection by an official inspector of the U. S. Department of Agriculture. They were found uniformly infested regardless of from what source they came. Two growers claim 30% damage in the shipments they received, and other growers were all more or less unwilling recipients of equally infested stock. It is a fact that the condition of stocks imported this year ran even worse than in the two preceding seasons.

Now in order to prevent any mis understanding, I wish to say that those figures are 30 per cent damage. As to how far it was infested with the narcissus fly, larger and smaller, I cannot say exactly, but they were damaged to an extent of 30 per cent by the narcissus fly.





It will be claimed as usual that the troubles with bulbs this season are the result of "heating in transit". "Heating in transit" does not create the larvae of the Narcissus Fly, Lesser Narcissus Fly and insects found in this year's importations. In lots where these larvae were working there was quite naturally rotting and heating which affected other bulbs causing them to rot also. It is noticeable that lots free from the pests, but in the same shipment are also free from the "Heating in Transit" rot. It is possible to distinguish between these different troubles. We do not want heated bulbs and we do not want infested bulbs. We ask that the embargo against the importation of bulbs infested with insect pests be continued in force since these pests were abundant in importations of this season as they have been in the past.

It will be claimed at the hearing that "there is no use closing the stable door after the mule is out", We contend that the American bulb industry is today virtually free from the pests infesting the foreign industry, and that by proper inspection, sanitation practices and cultural methods with an embargo keeping out the annual re-infestation, we can maintain clean conditions and give to the American purchaser a finer higher grade product than he has been able to import since the pests got into the foreign industry. For example we have in Eastern North Carolina



extensive plantings of naturalized bulbs which have been found on inspection this fall to be quite free from all pests. They are as sound as the American dollar. This shows that the objectionable pests are not at this time established in this section. The contrast between this naturalized stock and the kind of infested stock being sent to America from Europe is most impressive. The growers of Eastern North Carolina wish to maintain the healthy condition of naturalized ornamental plantings. We have little chance of doing so if the foreign bulbs are annually permitted access to America in infested conditions. We have no grudge against the foreign producer, but we insist that he should rid his products of pests if he wishes to export them to this country.

If it is claimed that the importations of the last three years have brought us the same troubles as Europe, and that the infested foreign bulbs, therefore, might just as well be allowed to enter, we answer that this is not proved, and until it is we have the right to the protection of an embargo. Moreover should it be established that some pest is found in one section, say plantings in California for example, it does not follow that the foreign bulbs should have access to all of the states of the Union for the machinery of protecting one state against another is already established in America.

Again, we have every reason to believe that we can stamp





out any slight infestation which may appear as a result of the importations of the last three years. In the first place we have, for example, inspected and voluntarily culled and destroyed hundreds of dollars worth of imported planting stock in Eastern North Carolina to prevent causing infestation. In the second place, providing the Department stands by us, we propose the establishment of cooperative cooperatives for the treatment of all narcissus planting stock. Farmers Bulletin #1270, U. S. Department of Agriculture recognizes this practice to be effective. Thirdly, we are using an entirely different cultural system, which in itself renders infestation of Narcissus by the fly less liable.

D. It might be claimed, that if the embargo continues in effect it will result in a shortage of forcing bulbs. We do not believe this, knowing of the extent of plantings made throughout the United States, but granting that there will be a shortage, the trade cannot hold the Department responsible as it has had three years warning and three years in which to prepare for changed conditions. Moreover, this possible shortage can only exist for a year or two at most, and it will not bring general hardships to the trade since the florist and the public have other kinds of flowering plants which may be used to temporarily make up any shortage in Narcissus.



On the other hand the removal of the embargo at this time would take the American bulb producer by surprise, and since this is a new and undeveloped industry he could not compete successfully with the foreign bulb producer, now thoroughly entrenched financially and through business connections with our American bulb dealers.

E. We disagree with the bulb dealers' claim that a shortage of Narcissus during the next year or two would result in permanent loss of worthy sorts because of inability to re-introduce them on the American market. This (if it happened) might result in some difficulties, but it would not be an impossible situation.

On the other hand the establishment of an American industry is sure to benefit American horticulture for under the stimulus of industry we will be sure to inaugurate breeding and selection projects of our own which in time will reasonably be expected to bring forth improved new types and varieties.

F. We recognize that the Federal Horticultural Board is not a guardian of American economics. We are not asking it for protection along economic lines, we do ask that it avoid unexpected shifts of position. The Department cannot avoid the responsibility for the losses which such unexpected reversals of rulings will bring about.



It will be charged that the American bulb grower is asking a tariff under the guise of an embargo. We feel that a high tariff would be needed to save the American industry from the effect of a reversal of the embargo, but we see no hopes of safety from this source since the interests now endeavoring to break down the embargo would be fully as willing to fight a move for a tariff. Moreover a tariff could not serve the purpose of an embargo. America needs protection from the pests infesting foreign Narcissus bulbs and the American bulb industry demands protection against the annual infestations which could come into this country, tariff or no tariff, unless excluded by an embargo.

### Conclusions

We recommend and urge, therefore, Mr. Secretary, in behalf of the bulb growers of North Carolina and American horticulture and agriculture in general, that you retain the embargo on Narcissus and related bulbs decided upon after open public hearings as the mature judgment of your distinguished and eminently fair predecessor, Hon. Henry C. Wallace, and your Federal Horticultural Board.

We ask this because:

- (1) Examination of bulbs imported this year by North Carolina growers showed infestation with larvae of the Narcissus Fly, the lesser Narcissus Fly and mites with resulting <sup>rot</sup> to the





extent that the growers claimed from 10 to 30 per cent damage.

(2) The foreign phytopathological services seem unable to prevent this condition since the condition of this year's importations were even worse than in the two preceding years.

(3) With the help of the embargo preventing annual re-infestation we have under American conditions the will and the way to stamp out the Narcissus flies and other pests should they have gotten a foothold inadvertently.

(4) An official inspector of your Department failed to find in North Carolina this autumn eel worm troubles though he was escorted thoroughly over the field.

(5) The complaints of some importers and bulb dealers do not call for sympathy since they have been granted due consideration already at a risk to the American bulb industry by the three year period now ending and they have failed to use this period with a view to cooperation with the Government and the American bulb industry, but have chosen to champion the foreign bulb.

(6) The American grown bulb is not inferior as claimed but fully equal in merit to the Dutch bulb. In fact, in some respects it is superior as, for example, in the matter of earliness with which it may be put on the market when grown in the South.



(7) The maintenance of the embargo will stimulate American industry and benefit American horticulture by introduction of new and improved types as a result of breeding and selection work which will follow commercial development.

(8) A tariff will not keep out foreign pests though it might ameliorate financial matters. Only an embargo can effectually prevent the entry of infested bulbs and protect the American industry.

(9) The rescinding of the embargo would have the effect of:

Destroying confidence in future rulings of the Department, aiding foreign industry at the expense of domestic industry. Retarding the production of American grown bulbs. Bring financial ruin to some American growers and financial loss to all.

Letting down the bar to foreign pests injurious to American horticulture and agriculture and certainly hastening, if not causing the complete introduction of the eelworm and other pests.

With assurance of our willingness to cooperate under the present protecting embargo in the stamping out of any existing or developing pest infestations and in the work of building a clean and prosperous American industry, we confidently leave our case in your hands.





This is signed by the Committee for Bulb Growers of Southeastern North Carolina.

Mr. A. M. White: The next speaker is Mr. H. G. Friedmann.

Mr. Friedmann: Taking my cue from the introductory remarks of the presiding officer of this meeting, I am going to stick to the subject and I am going to make it snappy.

I appear at this hearing, (held November 16, 1925, to consider the restrictions on the entry of narcissus bulbs into the United States, under Quarantine 37), for Buckfield Plantation, located near Yemassee, South Carolina, and as the personal representative of Mr. C. W. Kress, the owner of that property, who is unable to be here in person.

This plantation, covering about 11,000 acres, has been engaged in the production of paperwhite narcissus bulbs since the fall of 1923. We have 800 acres of land ready, now, in which to grow paperwhites. This land has been carefully prepared and equipped with tile drainage and sub-soil irrigation, under the direction of practical experts, some of them from the U. S. Department of Agriculture, for the purpose of raising paperwhite narcissus bulbs in large quantities. We have installed 127 miles of tile drain, and provided a complete and expensive equipment for raising and preparing these bulbs for the market.

We have \$750,000 invested in this enterprise, a sum



equal to the total American import value of paperwhite narcissus bulbs imported annually from France for the American market.

In 1923 we planted over 1,000,000 bulbs and in 1924, over 4,000,000. We harvested over 7,000,000 in the summer of 1925; bought 4,000,000 new bulbs and planted 11,707,000 paperwhite bulbs this fall, and are now planting 600,000 more, making a total of 12,307,000 Paperwhite Bulbs.

From the results of increased which we observed in the spring of 1924 and 1925, we should have for sale next summer 10,000,000 bulbs, which, together with those now being produced in Southern, Western and other water bound States, should be sufficient to supply the requirements of the American public.

For the purpose of making a thorough and complete investigation of the methods of planting, we have had an experienced bulb man spend considerable time during the past three summers in the south of France, during which time he has, by careful selection, procured suitable bulbs for planting stock.

Last fall, we tested stock which had been produced from offsets and found that our home-grown bulbs could be forced, and that they flowered equal in quality to the French-grown.

We are familiar with the methods employed in the south of France and know that our bulbs are fully equal to those grown there. Furthermore, our large acreage gives us the added advan-



tage of practicing crop rotation, by which plant diseases are kept under control, and which, from our investigations, we know is not generally practiced in the south of France.

We plan to sell 25,000,000 bulbs annually, within the next two years, as we have enough prepared land to do this and rotate crops. Should conditions warrant, we are in a position to develop within two years, 400 acres additional land for bulb culture.

Dr. David Griffiths, of your Department, and Mr. J. T. Rogers, Federal Horticultural Board Inspector, (stationed at Charleston), have been at Buckfield Plantation and are familiar with what we are doing. Mr. Rogers, on October 5th, 6th and 7th, 1925, inspected our crop of bulbs planted in the fall of 1924 and lifted in the summer of 1925, and reported them as apparently exceedingly clean and healthy, and the lot, taken as a whole, beautiful specimens, being of splendid size and very sound. An occasional bulb, showed some softening or rotting. Specimens of the last mentioned kind have been forwarded to Washington, for microscopic examination, to determine if these bulbs harbored any dangerous insect pests or disease. We have been informed by the Department that they have been found free from eel-worm or narcissus flies, or other pests and plant diseases.

I am not an experienced bulb grower, but we have at this





meeting Mr. T. J. Irvin, the Manager of Buckfield Plantation, an experienced bulb grower in the black lands of South Carolina; and the experienced bulb man who secured our planting stock of bulbs for us in France and supervised our plantings, who will be glad to give any further information the Department may desire regarding paperwhite bulb culture at Buckfield Plantation.

We have been put to great labor and expense in providing suitable, clean land and first-quality clean bulbs, and we ask the assistance of the Department in protecting them against infestation.

~~WE~~ ~~there~~ therefore respectfully, but emphatically protest against any change, at this time, in the restrictions on the entry of narcissus bulbs into the United States, for the following reasons:

(1) From our investigations, made in the U. S. Department of Agriculture and elsewhere, we are convinced that there is greater danger of infestation of American plant life, at this time, through importation from foreign sources than there was three years ago..

(2) The present restrictions were promulgated, about three years ago, by the Department, only after thorough study of the whole situation, extending over a period of years, and after an impartial and complete hearing of all parties concerned



and after careful and mature consideration of the arguments for and against. The burden is therefore on those desiring a change in these restrictions, to prove that conditions have changed to such an extent that there is now no danger of infestation. It is clear that the Department should make no change in these restrictions until it is absolutely convinced that they are now erroneous.

(3) The Department, through its officials, has encouraged American farmers to engage in the production of these bulbs to supply the American market. This has led to the development of a considerable new industry in the United States, with a necessary investment of a large amount of capital. These would all be jeopardized by a change in these restrictions.

Congressman Drane: Mr. Chairman, ladies and gentlemen, I will be very brief with what I have to say. I have traveled a thousand miles from that paradise down there to this inhospitable climate just to represent my people for a few moments, to enter a protest in their behalf against any letting up of the quarantine regulations. We would like to see them made even more drastic than they are.

Florida has 1400 miles of seacoast; as you know, she lives upon what comes from her soil.

(Laughter from the opponents.) I hope you gentlemen all of





you have bought some of our soil. If you have not, you had better hurry, because the price is going up all the time, (Laughter) and eventually you will want some of it. I have had mine for 42 years. We are close to the West Indies and therefore we know about the pest. We are very very anxious that no let-up be permitted in the quarantine, whether it be for fruit, flowers or general crops.

I think that this is the ~~fourth~~ fourth hearing of this honorable board, if I am not mistaken, beginning back in 1918. Am I right, sir? And at every hearing Florida has been represented by her growers as individuals and by some members of Congress, either from the House or from the Senate. I know that the whole delegation attended the hearing in 1922, and we are here to write our protest now, just as we have done three times in the past. I think that is all I have to say. I believe I have made it emphatic enough. In closing, I say again that Florida begs of you, do not allow any let-up in the quarantine. I thank you.

Mr. A. M. White: We will now hear from Mr. T. A. Brown.

Mr. Brown: Ladies and gentlemen, I have no set speech, but I beg the liberty to give just a little history of the industry in Florida. You can see that I have talked myself hoarse about it these last three years. There is no telling what my voice will be thirty days after this if this embargo is lifted.



We have known for years that narcissus would grow in Florida. One man in Florida, Mr. Godbey of Waldo, has been growing narcissus for nearly 18 years. I do not know just the time he started, It has been a long time. He has been growing them successfully. We have known that it would make excellent blooming forcing material for years. That has been decided numerous times. Mr. Godbey started in with one thousand each of Paperwhites and Chinese lilies. He refused to buy any more because he got those that were absolutely clean and he said he would not risk his original stock by planting imported stock with it, because he had seen trouble brought into the country. He has built up his business, increased his business, so that regardless of the competition of all of Europe he has made money. He is satisfied with the growing conditions as he has them individually. He is satisfied with his investment. He has been so satisfied for many years. It is not so much a matter as to whether or not we can grow narcissus to supply you folks in the north, narcissus which are just as good as you can get from the best parts of France, but, we in Florida, as our honorable Congressman has just stated, know what pests and diseases amount to. We have paid for our education and we expect to continue to pay for it. We expect to pay for our education as long as we raise crops in Florida, but we do not want to pay any bigger price than we have to.





~~Some~~ 15 years ago an apparently unimportant disease was brought in. It attacked our grapefruit which was becoming an excellent industry. We had no protection, you might say. We had no port inspection, no Florida Plant Board. We had to depend largely on our own judgment, and, you know, an amateur is not much of a judge of those things. We had no state protection and just what the Department of Agriculture could give us at that time. They were not as strong then as they are now. We got citrus canker in there and it threatened to absolutely wipe out our citrus industry. Thousands and thousands of acres were burned to the ground with fire played on them with an apparatus for that purpose. It cost our state millions of dollars to fight that proposition. That was brought in as an innocent looking pest, and when we were told that the Department had passed a rule which would protect our narcissus industry we thought about all of these women and others who would want to get a supply of these bulbs, and we thought that if we could furnish them good clean bulbs, home-grown bulbs, that we knew were all right, we would be performing a service to them and adding to our state a valuable crop. Our people do not take to new crops so easily. We cannot all grow grapefruit. We cannot all grow strawberries, nor can we all grow celery. I take --- I guess, I better put it this way: I assume the credit for





being largely instrumental in the building up of this narcissus industry. If the embargo is not put on I may have to take the discredit of it. I work as a county agent. My occupation is that of county farm adviser. There is another man here with me that has worked hand in hand with me. There are individuals here whom we have interested in this proposition to build this crop up in our state and we have done it with the assurance of the Department of Agriculture, for whom we have a profound respect and whom we consider as experts in their lines, whose judgment we do not question at any time --- we have built this industry to where, using what stock Mr. Godbey could furnish us, to the point where it is very large. Mr. Godbey has sold in carload lots for the last four or five years. We have also brought in what stock we could under scrupulous inspection at our port. We have built this thing up within the last three years under the assurance of protection from imported pests, to a point where we now have around 20,000,000 known plantings of Paper white narcissus, including just a few Chinese and other narcissus. (Applause from the proponents.)

Our people took our word-- We extension workers --- that the United States Government was behind what we said. We were glad to put that idea forward. Since the time of the citrus canker we have an excellent board in Florida. We feel



we are absolutely safe in growing this crop if we are protected from invasion by pests. Our people are sold on the idea. They have put their money into it. A good many small growers, that is, a good many intensive truck growers, have planted an acre or two. We have picked out the best growers in our state, the best people whom we thought we could interest in this thing, and induced them to invest in it. I led the way with this new crop to show the people the best way to grow it. They are people of good sense. If we have to go back to them and tell them that the Government did not mean what it said, that some importers and forcers came along and told the Federal Horticultural Board that they did not know what they were talking about, and the Government said to them, We will have to take this back, boys, why we will just have to go back to them and tell them, "You will have to be good losers." It is going to discourage us county agents to the extent that we cannot conscientiously go on with our work. We will have to go and scout real estate for Mr. Drane, or something like that. It will break down the idea in the state of county agents introducing now valuable crops among the farmers. Hundreds of thousands of people are coming to Florida. Many of them want to farm. They go to their county agent and ask him, "What can I raise in this country, that I can make a living on?" After we tell them what we think they should raise we also say,





"You might try a few bulbs along with your other crops."

Now, then, if this embargo is lifted we have got to go back and face those people. They sent us up here. We have a state-wide organization of growers who are interested in this proposition and who <sup>sent</sup> ~~s/t~~ their president up with us. We state workers are not growers and are not financially interested but they have sold us the idea and we came here to show the people here and the Department of Agriculture that we mean business. We have every faith in the Plant Bureau and Department of Agriculture and we honor their opinions. If it is necessary for them to turn us down on our request we will take it like good scouts, but we implore the Secretary of Agriculture to stand by us as we have stood by him and help us to make this an American industry, clean and free from bugs or other pests. (Applause from the proponents.)

Mr. Vogelsang: Mr. Chairman, I was a little late in getting back, Has any arrangement been made with respect to hours?

Assistant Secretary Dunlap: No particular arrangement. The other side just volunteered to get through in two and one-half hours.

Mr. Thomas N. Bussey: I want to read a quotation from a statement made by Dr. Marlatt yesterday, to show how far we have digressed from the matter for which we have traveled a long dis-



tance to consider. Dr. Marlatt, in his mimeographed statement distributed yesterday, states, "The only basis for a reconsideration of the restrictions authorized in 1922 or for objection to the extension of that action to the hyacinth, for example, must be information which clearly indicates that the establishment of these bulb pests in the United States is now so widespread and so impossible of control by any reasonable means that the constant reinfestation from bulb importations will not greatly aggravate the situation," in other words, that the opportunity for protection from these pests has passed.

I wish also to say, Doctor, that other matters have become involved in the question of plant disease control. We realize that this quarantine is only a part of a general protective measure with which our government, through its Department of Agriculture, <sup>has seen fit</sup> ~~seems~~ to surround our American farmers, producers and plant lovers.

Quarantine 37 is a big issue with us, because some of us are vitally interested in bulb production. It is a big thing. However, it is a little thing as compared to our United States as a whole. It is a part of our general protective program. What are a few flowers as compared to our national food supply? Those flowers run into quite a sum of money. On the other hand, if through those flowers there is a menace to our American



agriculture, without questioning whether the Board is right or wrong in placing this restriction, can't you give us American farmers the benefit of the doubt? Are we not entitled to that, at least? I think it has been shown, that the statistics and data will prove, beyond a shadow of a doubt, that there is some menace, that there is a danger. May we not have the benefit of the doubt? I think that we are entitled to it.

But, Mr. Chairman, there is another issue in this matter. Some three years ago we were told that there was going to be a bulb shortage, that unless we grew our bulbs in America that we were going to have to do without them. Without questioning the wisdom of that ruling --- we are not here today to decide whether they were right or whether they were wrong --- the fact is that the decision was made. Now following that decision, Americans have become engaged in the production of bulbs in this country. In addition to the native-born Americans there are also some from other countries that we have been so fortunate as to acquire in this business. In our section of Florida we have acquired some Dutch citizens and I wish that something would happen so that we could get more of them. They are good people. We need more of them. (Applause.) I represent a group about of/25 growers. We have an experienced Dutchman employed to supervise our work, to keep us straight. He is on the job, is





clean in his business, and he knows. I wish that all were as clean as he and the other Dutchmen that I know. We are producing bulbs. That has been challenged time and time again, the question of the quality of our bulbs. I want to say this, my friends, that if the same amount of energy and talent and money should be spent now in the production of bulbs, in backing us up in this country in the production of bulbs, as has been spent in resisting this quarantine, I think we would get further, we would be far more able to give the ladies of our country flowers, than to have to experience the hindrance that we have had to go through.

I was interested yesterday to note that 75 per cent of the bulb importers had signed a list to a petition asking that quarantine 37 be lifted. I know of two bulb houses that were not on that list. Those bulb houses are growing bulbs in America. If  
/They did not know that they could grow good bulbs, do you think that they would want to be shut off from their source of supply?

Here is another point. How would you like to be in the shoes of those men who have put their money into this home-growing of bulbs, those men who know that their quality is good, if the embargo is lifted? Some of the trade know that those home grown bulbs are good, although there will be a mass of evidence to prove that they are not good. I will admit that some of the



bulbs from Florida are not good. But it can also be stated that some of the bulbs from Holland and France are not good. I know that, because I bought and paid for them. But, we can produce good bulbs. We know it, and some of you know it.

I can understand the gentlemen of the trade, that is, the importers. I can readily understand that they are concerned with this shortage. I dare say that you were surprised to learn what a showing has been made with reference to bulb production in this country. You have learned facts which you have not known before regarding the quantity of bulbs grown in this country. I think a good many came to this meeting to fight the measure who are going away to stand by us. You are coming here and you are going to learn that we are growing bulbs in this country. You will learn that we are growing them on a bigger scale than you ever dreamed of.

Now, as to the question whether these pests are already here in sufficient quantities, in such quantities that we cannot control them, I will answer that by simply stating this, that narcissus grows in different sections of the United States. The fact that they are growing, naturally, without interference from diseases is proof enough that they are not diseased.

Now, with respect to the plantings in Florida, I know personally that the first planting stock has been watched very





carefully. We want to plant clean stock, want to keep our stock clean. We know what it means down there to fight disease and insect pests. We are watching our plant stocks very carefully. I have seen some stuff damaged by diseases and insects, but, on the other hand, that damage is very slight, due to the care which we have been using. We have observed great care in buying our planting stock, and I want to say that 95 per cent of the planting stock in Florida was bought directly in France before we ever knew of any of these insect pests and diseases which we are discussing today. It was carefully graded, selected, and sent here for us to plant, and so we are practically free from diseases and troubles, so far. <sup>But</sup> What will happen to us now, what will happen to our business with clean stock or stock which we can keep clean? What is going to happen to us if quantities of diseases to these bulbs are brought in from abroad and infest our fields? We have gone to the trouble and expense to keep clean to start this business --- where will we be when these diseases and insect pests are brought in? Of course that is beside the question, but it is certainly worth considering. I feel that we should have some consideration in this matter.

We have gone after this business without asking for favors. We have not asked money. We have taken our own money. We are not asking anything of you here today, simply asking that you be



good sports, stand by the ruling. We have stood by. We have answered the call to produce, and now we ask you to do the same thing. Our records show that we are producing bulbs in sufficient quantity. Our records show that our bulbs will flower. There may be a shortage, a slight shortage. It will not be serious. I want to say this: there have already been four hearings on this question. As soon as a definite attitude is assumed in regard to quarantine 37 I will guarantee that there will be enough bulbs and then some produced in this country. At that time the question of price will certainly not be a factor. More farmers are ready to go into this thing today, but the uncertainty of the situation has kept them out. The sooner that we assume a definite, clean-cut attitude in regard to our bulbs the sooner we are going to get into full production. I dare say that there are importers in this audience today who are considering the question of getting their bulbs grown in this country. As soon as it is settled that quarantine 37 is going into effect they are going to produce. There is no question about home-grown stock. Settle this question of quarantine 37 and we will get bulbs for our ladies. We will then get bulbs for our florists, for forcing, and get them grown right.

Now, as to the question whether these diseases have gone beyond control, there is no need for me to discuss that. The



facts speak for themselves. They have not gone so far that they cannot be controlled. That is all a matter of record.

I do feel, my friends, that we as producers are certainly entitled to some consideration in this matter. (Applause from the proponents.)

Dr. G. H. Randall: I feel that Florida is entitled to some consideration.

Purpose of this Conference.

I understand the purpose of this conference is to "make a fair and correct decision" as to the validity of the restrictions contemplated under the embargo act, and that "the Department expects with an open mind to make a correct and fair decision."

The causes which have led up to this subject of embargo are the bringing to this country of plant diseases, plant parasites, saprophytes, and destructive fungi. It is clearly shown in the literature prepared by the U. S. Department of Agriculture which was distributed in this room yesterday that foreign plant insect pests to the number of 82 in the past two years have been brought to this country from Holland and France. This 82 does not include the specific bulb pests, three in number. The plants and vegetables, besides ornamental bulbs, that are affected by these insect pests are carrot, parsnip, onion, alfalfa, clover, asparagus, asparagus fern, and smilax.





What other hosts these 82 other insects prefer is not stated because many of them, being new to this country, their favorite habitat is not known.

I do not propose to review the very complete testimony and evidence presented by the Department, but to summarize it by saying that it has been clearly shown that the safety of nearly all agricultural operations demands closing our doors to further importation of these well-known menaces, and this at once.

I am not in sympathy with the thought that infestation of our crops has already gone so far that further restriction would be superfluous. We might as well say that because two children in a family of five have died of diphtheria the use of antitoxin would be superfluous in the remaining three.

The U. S. Department of Agriculture has been said, very truthfully, by the Honorable Congressman from North Carolina to be less criticised by the populace than any other department.

I agree with the honorable gentleman. I was honorably discharged from the Medical Department of the U. S. Army after holding a commission twelve years. The Department of Agriculture is for the advancement of the interest of the basic industry of this nation, namely, agriculture and horticulture, which, reduced to its simplest terms, is dirt farming. I have the honor and



pleasure of having 142 acres of dirt farm in the best dirt farm state in the Union, Florida. I have the further honor to be the President of the Halifax District Growers' Association, also to be the Executive Director of the Bureau of Agriculture of the Daytona Beach Chamber of Commerce, which is the second largest chamber of commerce in the world. I was sent here by my constituents to do all in my power to protect their interests. I can do little but enter this protest.

Nothing was said yesterday about Florida as a bulb-producing state, yet we have planted in Volusia County (my county) alone, today, over 70 acres in the bulbs under discussion. In the last month I have visited bulb farms in six counties in Florida.

One of the pioneers in the bulb industry in Florida is Mr. Godbey of Waldo. He has been a successful bulb grower for 16 years. He is a past master in the art. He has 30 acres in bulbs today. Mr. Jurgens who is here with us has a very successful bulb farm at Daytona Beach. I hope to hear from him. At National Gardens, ten miles north of Daytona Beach, there are now about 30 acres in bulbs. Here are photographs of the bulb industry near Daytona. The bulb industry has taken on a great impetus in Florida in the past two years for two reasons

First, because the Department of Agriculture at Washing-





ton gave us the assurance that after January 1, 1926, "no fur-<sup>305</sup>  
ther importation of bulbs would be permitted", hence we would be  
called upon to supply the demands of dealers and florists.

Second, it has come to be known that Florida has a very  
favorable soil and climate in which to develop the bulb industry.  
Florida bulbs flower earlier, and less "go blind" than bulbs from  
most other sections of the United States.

Theodore Roosevelt once said: "You can't change the rules  
of the game after the play starts." This is something of an  
axiom among honorable sportsmen. If the Department of Agricul-  
ture lets down the bars to Holland, France, Belgium and Japan  
and allows infested bulbs to pour into the United States for  
the next two years, that department will come in for a more ad-  
verse criticism than would justify the North Carolina Congress-  
man's remarks. The entire opposition to the embargo so far  
shown has been from traders in bulbs, not from producers of  
bulbs. The opposition has shown, to speak mildly, supreme in-  
difference to the technical details of scientific bulb culture  
and entomology. The bulb business to them is a legitimate buying  
and selling of bulbs and cut flowers. They are well organized  
under various society names. Their speeches are well prepared  
and not abbreviated. Their lobby is well organized. The dirt  
farmer is not an organizer. He works alone with his crops.



His psychology is such that he despises politics and intrigue.

The dirt farmer is the Atlas that holds up the world. It is not the function of the Department of Agriculture to decide questions of tariff, but it should be a part of this memorandum to say that most of what the farmer produces must be sold in an open competitive world market, exposed to the full force of foreign competition, whereas about all he buys is sold to him under a very effective tariff protection.

We feel that the U. S. Department of Agriculture should give more consideration to the interests of the American farmer than it does to the propaganda of those who simply buy and sell his crops for gain. Middlemen are all right as long as they are middlemen. It is when they usurp the place of the end man that they come to be a detriment and menace.

We understand fully the principles of international reciprocity, but after a two years post-graduate course in our recent mix-up with Kaisers, Kings, and other things I am almost persuaded that it is America first.

Mr. A. M. White: There are several growers in Texas represented by Mr. A. Miller, president of the American Bulb Company.

Mr. A. Miller: My position for several years has always been more favorable on that side (indicating the side of



those opposed to the quarantine). Last year we imported about 30,000,000 bulbs. Our business is to distribute them to jobbers, who in turn distribute them to retailers. When it appeared that this embargo would go into effect and we were told to grow American bulbs our position changed. This summer I was in Europe, to make investigations, to determine whether we could supply the proper stock. I went there with the confidence that the supply is in Europe. While in Europe I heard remarks to the effect that it was quite possible that the embargo would be lifted. I had in my pocket a letter of credit to the amount of \$50,000, intrusted to me to buy bulbs for my customers. I immediately cabled to our office in Chicago and asked our Chicago office to get in touch with the Horticultural Board and ascertain if there was any real foundation for those remarks. I received word back that there was no foundation for those remarks. I then proceeded to purchase those bulbs. Now, would you expect me to go back on these people that I have encouraged to invest? I am not in a position to say whether the bulbs were inspected here or over there. I know very little of diseases of bulbs. I represent a firm in Texas that has planted 10,000,000 bulbs, more or less. I have the figures here to show you where there are 60 to 70 people engaged in planting this quantity of bulbs. I believe it will assist in





solving some of the problems in the State of Texas, where we have such a large colored population. They seem to like this business, and I believe they are going to make good bulb growers. I do not feel that if we are to be successful that there will be any rise in the price of bulbs. I feel that unless some unusual damage or infection arises, over which we have no control, that we will be in a position to supply 8,000,000 narcissus bulbs to any of our customers who wish to buy them. Our order blanks show that the goods are not guaranteed. We will have to continue that practice. It is necessary to do that, because we do not know in what way they are going to be handled after they leave our hands. Thank you.

Mr. Roeding: I would like to have General Blanding, a member of the Plant Board of Florida, say a few words, before we take the floor.

General Blanding: Mr. Chairman, ladies and gentlemen, I believe you think that Florida has taken up a sufficient part of the time already. I will endeavor to be as brief as possible so as not to create any further impression along that line. I represent and am a member of the Florida State Plant Board and I am also an official of the Florida Citrus Exchange, the largest organized horticultural body in the State of Florida.

Yesterday, Mr. Secretary, and this morning you have

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listened to many words. I judge that most of the information presented to you, you are already familiar with. I do not imagine that I shall contribute much, if any, to your store of information.

I have noticed that although the majority of the speakers ostensibly addressed you, yet their remarks were palpably intended for the audience. I shall be far more frank than the others and state here and now that with your permission I am talking in large measure directly to the assembly.

You have heard the importers and flower lovers advocate the continued admission of bulbs. You have also heard the American bulb producers present their views. It is my intention to approach the subject under discussion from an entirely different angle, and feel assured that I can not be charged with being biased either for the importer or for the domestic grower

It so happens that I am a member of a body which is charged with the duty of promulgating and enforcing plant quarantine regulations; that is, the State Plant Board of Florida; so I think I may speak with some degree of authority and knowledge on the subject of plant quarantine.

For the general information of the audience, let me say that certain well recognized principles, cardinal principles, enter into the consideration of every problem involving the prob-





able imposition of regulatory measures.

Some of these are as follows:

- (1) Does a danger exist?
- (2) If so, what protective measure is available and what can be accomplished through its use?
- (3) A careful weighing of the advantages of a quarantine as against the disadvantages, as represented by disruption and disorganization of trade and commerce.

Having considered these and other principles, a decision is reached. The speaker is very sympathetic indeed with the members of the Federal Horticultural Board and realizes and appreciates to the fullest extent the responsibilities of the position you occupy. You, gentlemen, are charged with the duty of protecting our vast horticultural and agricultural interests from further damage by introduced plant pests. It may be accepted without argument that these interests far exceed those of a few importers and a large group of flower lovers.

The interests of the Board should be and are solely of protection to agriculture and horticulture. Your body is a fact-determining and fact-finding body. We have confidence in you; we have confidence in the ability of your assistants; we feel assured that the Department is better equipped and better able



to ascertain accurately conditions existing, both here and abroad. We are willing to accept your determination. We are not willing to accept as other than opinions the statements made by unexperienced and untrained observers. We therefore say to you that if a danger exists, it must be guarded against, and we repeat that the agricultural and horticultural interests of this country far outweigh those of a few importers and flower lovers.

A statement was made by a speaker yesterday that the development of horticulture in this country had been the direct result of the importations made of plants from foreign countries. Might I direct the attention of that gentleman also to the fact that the plant pests which the farmers and growers of this country are combatting and which are costing millions and millions of dollars a year were also imported from foreign countries and in all probability upon those very plants to which he referred.

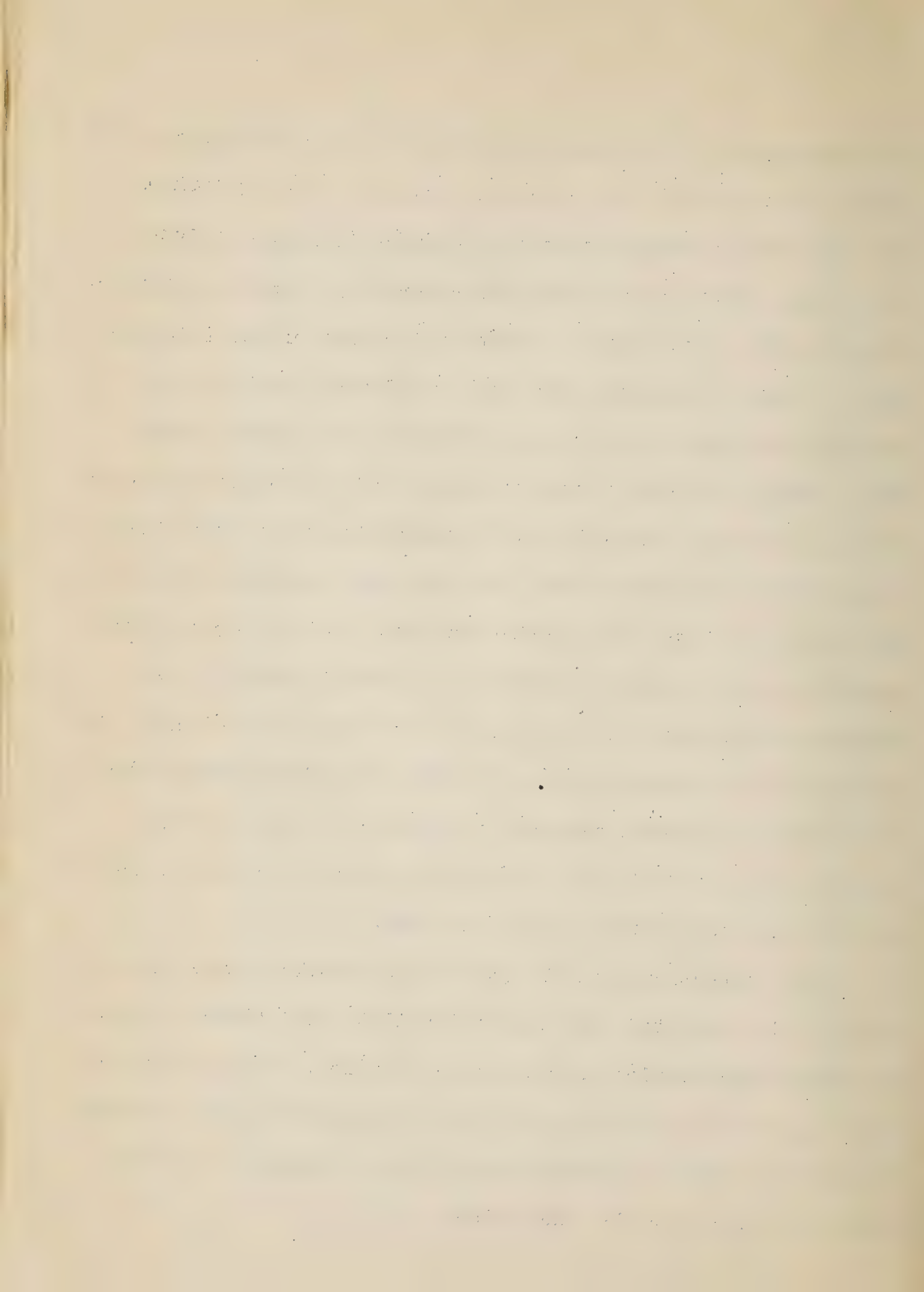
Much stress has been laid throughout these discussions upon protection against known pests. There is protection also to be secured against another danger and that, Mr. Secretary, consists in the unknown pest. It is a comparatively easy thing to fight a thing which you know is menacing you; it is an entirely different thing to fight a menace of which you are unaware. Let me cite, for the information of the audience and



for the purpose of recalling the matter to the Secretary and members of the Board, the classical example of citrus canker. This disease was brought into this country on nursery stock from Japan. That has already been covered by a previous speaker. It was a pest absolutely not known at the time of its introduction. It was introduced, mark you, gentlemen, prior to the creation and organization of the Federal Horticultural Board, but I submit that even though the Board had been in existence and if the policy had been followed of combatting only known dangers, no protection would have been afforded, and the disease therefore would not have been guarded against. We had no plant board in Florida, no quarantine system. As already stated, it was largely established and took millions of money in the fight. It cost millions to eradicate it. We believe we have eradicated it. So we have the unknown dangers to consider and that is why, Mr. Chairman, we feel that quarantines should be of such a nature as to be inclusive rather than selective.

In connection with the particular question under discussion, it is suggested that the availability of a source of supply be given consideration in reaching a decision. It has been or will be pointed out, no doubt, that the domestic supply of bulbs is ample and further importation of Dutch, Belgian or French bulbs will therefore be unnecessary.





That is a statement from the Plant Board of Florida.

I wish to supplement, Mr. Secretary, if you will allow me, that statement as a representative of the Florida Citrus Exchange, an organization of several thousand growers. This organization might possibly appear not to be interested in this matter of bulb quarantine, but we are interested in it. This organization has been in the forefront of the fight for clean horticulture and the fight against pests in Florida ever since its organization, and it is the feeling of that organization --- I may say also it is the feeling of the State Plant Board of Florida --- that this fight which has started here relative to the admission or the raising of the embargo or imposition of the embargo on narcissus bulbs is merely an opening, an entering wedge. We do not look upon it as being the whole thing, by any means. It is merely an opening wedge. If the fight is successful we believe the attack will be continued in an effort to weaken the authority and influence of this Board and of the entire Department of Agriculture. As was stated yesterday, this Department has the most confidence, the most complete confidence, of the country and Congress than any other Department of the Government. We agree with that. We want to see that confidence kept up and sustained. We want to assure you gentlemen that as far as the State of Florida is concerned, the authority of the State Plant Board, and

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of the largest organization of horticulture in the State of Florida, we are going to support you to the limit, and we want you to raise the qualifications of these quarantines, to strengthen them, rather than in any measure to weaken or remove them.

Mr. Roeding: Mr. Chairman, and ladies and gentlemen, I am the chairman of a committee representing twelve representative citizens of California appointed by the Director of the Department of Agriculture of California at a meeting of the California Fruit Growers in Sacramento. The subcommittee present here today consists of Mr. Chester H. Rowell, Mr. A. C. Hardison and Mr. Lee A. Strong, Assistant Director of the Department of Agriculture. We have also with us Congressman Free and we have also with us Congressman Swing, who represent the California delegation in Congress, and with your kind permission I would like to have them, when I have finished my talk, say a few words to you in reference to our position in this matter.

This morning while glancing through one of your newspapers I was exceedingly anxious to learn something of the proceedings which have taken place yesterday. I turned over the paper page after page and I could not find a single remark in reference to what had happened yesterday until, much to my surprise, I saw that this session was honored by an editorial on what had happened, and with your kind permission, Mr. Chairman, I would like to read this

1. The first part of the paper is devoted to a general discussion of the problem.

2. The second part is devoted to a detailed analysis of the case of a single particle.

3. The third part is devoted to a detailed analysis of the case of a system of particles.

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21. The twenty-first part is devoted to a detailed analysis of the case of a system of particles.



editorial:

### ATROCITIES OF THE BUG WAR.

"Fearing that a Dutch bug may interfere with the normal activities of genuine American insects, the Department of Agriculture has issued a mandate under which all bulbs of the Narcissus family are to be barred from entry into this country after January 1st. Florists and lovers of flowers are protesting vigorously, and will be given an opportunity this week to speak in defense of the Dutch bulb.

"Just what will happen to the scientists of the Department of Agriculture when they come to the end of their hunt for trouble is problematical. Those gentlemen of the microscope have been busy for lo! these many years. Once it was the Russian thistle which demanded the attention of the department -- an appropriation. Next a bug-investigating professor in one of the New England colleges inadvertently freed a couple of brown-tail moths and a few gypsy moths. They got busy up around Boston and raised large families. The department yelled for help. Congress responded with an appropriation of \$50,000. Men were employed to destroy the nests of these insects. But at a hearing in the House Committee on Agriculture some time after it was shown that these faithful employes, in order to continue on the pay roll, broke branches from the trees holding the moth nests, which branches they care-



fully 'planted' in other wood-lots, remote from the scene of their labors, thereby assuring a new supply of bugs for years to come."

Now, I want to say to you, my friends, that in one way or another I have been rather intimately connected with the work of the United States Department of Agriculture, and particularly so with Dr. L. O. Howard, Chief of this Division, and it certainly would have been a great source of great satisfaction to me if I could have seen Dr. Howard, instead of carrying his little net in which to catch these pests, planting trees to distribute these pests.

"Two or three years ago an embargo was placed on the importation of black currant bushes, because it was said that these plants were responsible for the introduction into New England of the white pine blister. Later the 'European corn-borer' found his way across the Atlantic, presumably in a package of seed corn. But while the department scientists are certain that some other pestiferous bug is likely to break into the country on a narcissus bulb those gentlemen have utterly failed to discover the cause of the blight which has killed every chestnut tree in Maryland and Virginia and has nearly wiped out all those in Pennsylvania. That blight is traveling northward. It has struck New York, and within five years there will not remain a living chest-

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nut tree in the State to shade the village blacksmith. However, the flivver has very nearly wiped the blacksmith and the harness maker off the face of the earth, anyway. So what's the use of the chestnut tree?"

Mr. Vogelsang: What date was that published and in what paper?

Mr. Roeding: In the Washington Post, this morning.

Mr. Vogelsang: Is that so?

(Laughter.)

Mr. Roeding: I will now quote from pages 16 and 17 of the Service and Regulatory Announcements of the Federal Horticultural Board covering the period January to June, 1922, relative to the functions of the Federal Horticultural Board.

(Reading)

"Largely on account of the somewhat misleading designation 'Federal Horticultural Board' for the administrative body provided for in the plant quarantine act, there has been a lot of criticism because this board was not made up of horticulturists. As to this point of view it would seem proper to point out that the Federal plant quarantine act is for the protection of all plants and plant products of the farm and forest whatsoever, and is therefore not merely, or even largely, a nursery stock or ornamental plant law. The designation





'Horticultural Board' is, therefore, in a sense a misnomer, and a better designation would have been, following the title of the act, 'Plant Quarantine Board.'

"It has already been indicated that the board is enforcing 24 foreign and 15 domestic quarantines involving the protection of the major farm and forest resources of the Nation and that Quarantine 37 is only one of these. Furthermore, in addition to its quarantine powers, the board, either directly or in cooperation with the appropriate bureaus, is concerned in the control under large Federal appropriations of such important pests already entered, but with limited foothold, as the pink bollworm of cotton, the white pine blister rust, the European corn borer, the potato wart, citrus canker, gipsy and brown-tail moths, Japanese beetle, and black stem rust, and other grain diseases. Probably 90 per cent of the activities of the Federal Horticultural Board and more than 90 per cent of the funds which are expended by or in cooperation with it have relation to subjects other than horticulture, and in the case of all these subjects is involved, where necessary, control of entry of foreign products under foreign quarantines and interstate movement of domestic products under domestic quarantines.

"Under the terms of the act this board must be appointed by the Secretary of Agriculture from the three bureaus of the

1. The first part of the paper is devoted to a general

discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the system has solutions for all values of the parameters  $\alpha$  and  $\beta$  if the function  $f(x)$  is continuous and has a bounded derivative. The second part of the paper is devoted to a study of the properties of the solutions of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the solutions of the system of equations (1) are unique and depend continuously on the parameters  $\alpha$  and  $\beta$ . The third part of the paper is devoted to a study of the properties of the solutions of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the solutions of the system of equations (1) are unique and depend continuously on the parameters  $\alpha$  and  $\beta$ .

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department (Plant Industry, Forestry, and Entomology) having direct relation to the farm and forest resources of the Nation from the standpoint both of production and of protection from losses due to insect pests or plant diseases, and, therefore, in its advisory function to the Secretary of Agriculture, represents these three important bureaus of the department. As now constituted the membership of this board involves two persons from the Bureau of Entomology, two from the Bureau of Plant Industry, and one from the Forest Service of this department.

"It would seem to require no argument that a plant quarantine board for the administration of a plant quarantine act, having for its purpose the prevention of entry of diseases and insect pests of plants, should be technically expert on the subject of such plant enemies. For example, we do not have a public health board consisting of mothers, school-teachers, and merchants, nor is the exclusion of live-stock diseases or the eradication of the foot-and-mouth disease, Hog cholera, cattle fever, etc., turned over to a commission of breeders of live stock.

"Any possible adjustments to safeguard commercial and other interests involved in such quarantine and control work should be secured by conferences with such interests, such, for example, as are provided for under the plant quarantine act in





the provision for public hearings after due notice at which interested parties may appear and be heard either in person or by attorney.

"The ample opportunity for such conferences under the plant quarantine act is indicated in the procedure with respect to all quarantines, as follows:

"1. Presentation of the need of the quarantine to the Federal Horticultural Board by experts of the department or others outside.

"2. Preliminary conference conducted by the board with the department experts or any others available.

"3. Open conference with the commercial and other interests involved. (This is optional, but often availed of, as in Quarantine 37, for example.)

"4. Formal notification of public hearing as required in the act.

"5. Public hearing.

"6. Further conference of board with department experts, and others to determine action based upon the hearing.

"7. Drafting of quarantine and regulations by the board.

"8. Resubmittal of quarantine and regulations to trade and other interests for criticism and suggestions. (Optional, but often done, as in Quarantine 37, for example.)



"9. Review of the quarantine and regulations by the solicitor of the department.

"10. Review of the quarantine and regulations by the secretary, and, if approved, their promulgation.

"With respect to plant quarantines, the policy of the department has been to act only after consultation with and on the advice of the experts and practical men in the various fields involved. In pursuance of this policy the department has acted with respect to horticultural matters on the advice of the many horticultural experts of the department and with others outside; similarly, in grain matters, in cotton matters, in forest matters, in truck-crop matters, etc., in each instance with the corresponding group of experts and practical men.

"The final decision, therefore, of the department on all plant quarantine and related matters is based on the information and judgment of its own plant experts as well as on the facts presented at these public hearings and on all other available information, and all quarantines and regulations thereunder are operative only when approved and signed by the Secretary of Agriculture."

Apparently, it has been largely due to the fact of the liberal attitude which the Federal Horticultural Board has exercised in these matters that it is being subjected to criticism



today. It has been said by those who are opposed to this embargo going into effect on narcissus bulbs that if the Horticultural Board was aware of the fact that these plant diseases or insects infested narcissus bulbs, why did they not then place the embargo on those bulbs at once? I want to say that one gentleman who spoke from this platform today advertised himself quite extensively. I do not want to advertise myself unnecessarily, but I want to say to you that I am engaged in the nursery and fruit business in California. I was born in the State of California and I have been a lover of plant life all my life and I am still deeply interested in it. I hesitate to refer to my friend Dr. Howard again, but I am going to do so. I am known in California as the bug man and I think I can claim the honor, with the assistance of the United States Department of Agriculture, of probably being the only man in the United States that is responsible for a bug. I am going to give you the name of the bug. It is Blastophaga Grossorum. That bug infests figs. It is probably the only insect which enters the fruit and goes inside and proves of beneficial influence, and it was largely due to the efforts of the United States Department of Agriculture and the Division of Entomology, over which Dr. L. C. Howard has presided for nearly forty years, that I was able to make a success of this one thing that put us





in a position to compete with Smyrna, the largest producer of figs in the world, and to produce in California a fig which is regarded as the finest fig grown in the world.

Coming back to the subject that I am expected to talk about, I wish to say this. I said a few moments ago that it was largely due to the fact that the Federal Horticultural Board had yielded on so many occasions to the commercial interests of the country that it was being subjected to criticism today. I heard statements yesterday from the opponents of this embargo going into effect, that, as I said before, it should not go into effect immediately but should be postponed in order to permit a further introduction of narcissus bulbs because there was not a sufficient supply available in this country now. We have had statements from other representatives in other states, explaining to you that there is a sufficient supply available, and even if there is not I consider that it would be a very grave mistake, indeed, if some of these pests have come in shipments, and we will concede that they have, to allow more shipments to come in at this time and carry the infestation further than it has already been carried.

In behalf of the bulb growers of California I want to say this. There is probably no state in the Union where quar-



antique regulations are more strictly enforced than they are in the State of California. In fact, they carry things there to the extent that quarantine regulations are enforced against counties if they find an infested section, and I can speak for the State Department of Agriculture that if this embargo is put into effect that every opportunity will be taken to, as quickly as possible, clean up those infested areas. I may say further, that those infested areas are rather small. You know, it is very difficult, indeed, for a man from California to resist the temptation of bragging about his state. Californians are noted for that, probably even more than Floridians, but, when you bear in mind, my friends, that California is as large as all of the New England states put together and Ohio, you will readily see that with our diversified climates and our magnificent soils that we have something to brag about. In addition to that, I want to say this, that it is unfortunate but nevertheless true that in a state like California with its rather equable climate that there is a greater tendency for the propagation of pests and for the distribution of diseases than in the eastern states where you have a much more rigorous climate.

I want, just for a minute, to dwell on the broad issues involved in this matter. It seems to me that the great trouble





frequently occurs that men see only their particular business. Now, I have no fault to find with the bulb growers of Europe nor with the men who are importing bulbs into the United States. I have visited Europe and I have visited these bulb sections. I have visited in France, in England, in Belgium, and I want to say to you that those men who operate those bulb farms, who operate those nurseries, are men who are vitally and deeply interested in plants and plant life. I want to say to you, further, that they have very great reasons to be proud of their nurseries. As one gentleman said here, on the other side of the room, they employed a Dutch bulb grower to lead them along the right line. I want to tell you gentlemen, that those men are experts and they do know their business, and it is unfortunate, indeed, very unfortunate, indeed, that men who do carry along their work along those lines, that they are doing, that because of these diseases which may come into this country, destroying our fruit and other crops, that their bulbs and other lines of nursery stock must be excluded. But the proposition goes much further than that, when I tell you, my friends, of some of the diseases that have been spoken of here before. I only wish to dwell on them for a minute. They mean so much to our agriculture and horticulture. I am not speaking for California alone. I am speaking for this entire country. You can



readily understand why we have come here today for the purpose of expressing our views and honestly laying the facts before you.

Do you realize, when you talk about inspection, how futile inspection is on some things? I want to tell you, gentlemen, I have been in the nursery business. I am now quite a large operator. I know the difficulties of inspection. I know what I am talking about. When I tell you, my friends, that the citrus canker came into Florida and into Texas some ten or twelve years ago on some Japanese citrus trees because there was a demand for this particular variety of the orange known as the satsuma, that they found after a short time that this citrus canker was affecting the growth of these trees and killing them, you will appreciate the gravity of this thing. Naturally, the United States Department of Agriculture was appealed to and it was only after two years of investigational work that it was discovered what this disease actually was. There was a young lady in the pathological division of the United States Department of Agriculture who reached this determination. I will tell you what <sup>had</sup> happened. That disease had spread from Texas. It had gone into Louisiana, had gotten into Mississippi and finally it got into Florida. This is what happened. In Japan our able men in the United States Department of Agriculture



said that this disease was not of any particular moment, but it found fertile ground in the United States; and what was the method of eradication? The method of eradication was the taking of a gasoline blast, burning up those trees, burning up the ground under them without a single cent of remuneration to the orchardists. It caused a loss of \$20,000,000 in which the Federal Government and the State governments combined to pay.

Not many years ago the gypsy moth made its appearance. I am not going to discuss just how it made its appearance. When I received seedlings from Europe a notice was sent out by the Federal Horticultural Board after the gypsy and brown-tail moths had already made their entry into the United States, informing all the nursery men of the United States that although those seedlings were being carefully inspected, according to reports on the other side, that the gypsy and brown-tail moths were coming in on fruit seedlings. I want to tell you that in my shipments I found 15 or 20 or more. I do not remember the exact quantity. The presence of the gypsy moth and brown-tail moth on our fruit seedlings at that time seemed to be of no particular moment. But, if you had seen in Massachusetts two years ago what I saw you would fully appreciate what some of these insect pests mean, not only to the forests of this country but to the fruit interests of this country. I knew of some of the patience





of the Federal Horticultural Board in combatting these dis-  
eases but I had no conception of the <sup>wide</sup> spread of these two insect  
pests, and the amount of energy, the amount of thought, the  
amount of scientific investigation which was being taken by the  
Federal Agricultural Board to hold these two diseases in check.  
I saw immense spraying outfits in which they carried a hose 1500  
to 2,000 feet in a forest, for the purpose of spraying those  
forest trees. That was done for the purpose of keeping these in-  
sect pests from spreading to other states. Only last June Dr.  
Harlatt made the statement to me that the United States Govern-  
ment was spending \$750,000 per annum in the eradication of these  
two pests. This, my friends, only illustrates some of the  
things that the fruit growing and the agricultural interests feel  
in connection with the introduction of pests and plant diseases.  
As far as I am concerned in my nursery affairs, although I do  
want some of these things from Europe, I <sup>would</sup> admit, I/rather see  
the Federal Horticultural Board ignore all the commercial inter-  
ests that are involved in the introduction of fruit tree plants  
and bulbs and let the greater consideration, the great agricul-  
tural and horticultural interests and live stock interests ---  
although they are probably not affected --- be given the first  
consideration, and I think it would be a great blessing to this  
country that instead of conferring with the commercial interests

1919

The American Medical Association is a non-profit corporation organized for the purpose of promoting the science and art of medicine and the health of the people of the United States. It is composed of the members of the American Medical Association and the members of the American Osteopathic Association, and is organized into a national association and into local associations in each of the states and territories of the United States.

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and determining what they want, that the Board do what is necessary. These commercial interests get what they want. At least they think they do. When an embargo such as this one is proposed by this Board all kinds of things are brought up showing that the Federal Horticultural Board is arbitrary in its methods. They say it does not give hearings, that it does not consider the various phases of these questions, that it arbitrarily makes these enforcements, regardless of the interests affected. I want to say to you, my friends, that I disagree absolutely with any such statement. I feel that this Board is ably supervised by Dr. Marlatt and is endeavoring to the best of its ability to consider every interest concerned before it puts its measures into effect. (Applause from the proponents.)

Mr. A. H. White: Are there other speakers from California

Mr. Rowell: Apparently I am among friends and I hope I can include Mr. Vogelsang, also Mr. Torchiana, the leaders of the opposition. I am here at the request of Mr. Hecke, Director of Agriculture of California, simply as a disinterested citizen. So far as I am personally concerned, my only interest is a few thousand bulbs --- I think mostly Dutch --- now being planted on my place in California. But in making that disclaimer of





personal interest I would like to say that we in California would like to join with North Carolina and South Carolina in the distribution of these bulbs to supply the vacancy that will be left if the embargo is kept on. We are interested in this question, of course, whether California joins in that distribution or not. We are asking nothing for California which we would deny to Holland. There are districts in California that are infested. It is a small district but it could be exceedingly small and still be as large as Holland. (Laughter by the proponents.) There are parts of California further from other parts of California than Spain is from Holland. If on this question of California joining in the distribution the question is raised that there are infested districts in California, California will join with them in cooperating to see that nothing is sent out of any infested district to the rest of the United States. (Applause from the proponents.) California also stands ready, if there is no further infestation, to clean up the infested districts and the State Department of Agriculture is here represented ready to say that if there is no further infestation they can and will clean up those infested districts and they will find every one of those infested districts. (Applause by the proponents.) Neither California, nor North Carolina, nor South Carolina, nor any state,

1. The first part of the paper is devoted to a general discussion of the problem.

2. The second part is devoted to a detailed analysis of the case.

3. The third part is devoted to a discussion of the results.

4. The fourth part is devoted to a discussion of the conclusions.

5. The fifth part is devoted to a discussion of the future work.

6. The sixth part is devoted to a discussion of the references.

7. The seventh part is devoted to a discussion of the appendix.

8. The eighth part is devoted to a discussion of the figures.

9. The ninth part is devoted to a discussion of the tables.

10. The tenth part is devoted to a discussion of the bibliography.

11. The eleventh part is devoted to a discussion of the acknowledgments.

12. The twelfth part is devoted to a discussion of the conclusions.

can agree to keep its clean districts clean if new infestations come in constantly. If those great plantings that have been made in the southern states are to continue, we must have proper protection. If that is not so then those places will be sources of infestation if they become infested. It does become important, therefore, that there shall be no further re-infestation and it is important that we recognize that it is not too late. (Applause by the proponents.) Dr. Marlatt has said that that is the one question. It was a bold step. It was a risky step, confessedly so, to make a three years delay in the putting down of this quarantine in order that the commercial and horticultural problem could be met. The only question is whether that delay was not fatal. If it was fatal, if the thing has gone so far that there is no preventing it from going further, then the fatal mistake was made then and we may as well abide by it. But the showing made here yesterday was that it was not fatal. Those who proved too much proved at least that. Why, we had a long list of gardeners here yesterday who proved that there was no infestation whatever in any bulbs that they had ever seen. (Laughter and applause on the part of the proponents.) It being conceded that there is plenty of infestation in these bulbs, this merely proves that they had not seen it. But, at least, they did see



/this, that whatever infestation there is is not yet of great economic importance, is not yet a great economic problem in America. Therefore, it is not yet too late; but the member of the Plant Board of the State of Florida has spoken to you of the menace of unknown pests. Every foreign pest is an unknown pest as to what it will do here. You have heard of the citrus canker that did little harm in Japan and yet it devastated every orchard that it touched here. The gypsy moth and the brown-tail moth both did more harm here than they do in their origin, in the homes of their origin. The chestnut blight has not exterminated the various chestnut species of the world, but it is doing it here. The American Phylloxera does little harm in America but when Europe was short-sighted enough not to put an embargo on American grape vines the vineyards of Europe disappeared with an American pest. So that, if these pests are not at this time of great economic importance in this country that is exactly the time when steps should be taken to see that they never do become such. (Applause by the proponents.) At least one of these pests is of economic importance in California and we want it cleaned out. At least one other of these pests is of economic importance even in the country of its origin. It will not do for us to guess that when it comes to this country it will be of





little economic importance. The usual experience has been that when these things come into a new country, sooner or later they become of economic importance. At any rate, this embargo has been based on sound, scientific investigation. We, in California, are interested in bulbs. We may be interested in exporting products, but we are more interested in excluding pests and we are most of all desirous of seeing to it that no pretext, not even one as skilfully put forth as this one, shall be used as a first entering wedge to change the policies of the Department of Agriculture of the United States or to undermine its strength so that its future policy shall no longer be based on scientific determination but shall be based instead on commercial pulling and hauling and compromise. Let us not begin with that now. (Applause by the proponents.)

Here is a danger that is not yet fatal. In some districts it has not yet occurred. We of California merely wish to offer to cooperate, even at our own expense. We will find clean districts from which to do such distributing as we do and cooperate with the national Department of Agriculture to see that they are clean, or ~~that~~ if we have no districts that you are satisfied are clean we will stay out of the business entirely. What we want is safety. What we want, in the classic and memorial language of the gentleman from Florida, is to avoid



infestation by politics or other posts. (Applause from the proponents.)

Congressman Free: I only want to take just a moment. I do not want to tire you. I appear first, at the request of several farm organizations of California and for the Chamber of Commerce in my district. I appear here also at the request of every member of the California delegation in Congress. We, perhaps, have gone further even than Florida, in fighting the pests. We have no pests indigenous to our soil. Pests have been brought upon us. We fear another pest. We fear that the blow has been struck. Three years ago they were asked to let in bulbs for three years. They have done that, and now the claim has been made that they should be allowed to continue to do that. That thought has been broadcast by propaganda. Mr. Torchiana is here and if any statement I make is untrue I ask him to challenge that statement. There has been raised a large sum of money in Holland. Mr. Torchiana has been employed at not less than \$100 a day with a very large expense account, and has gone generally over the country, advising the growers of bulbs to desist in their efforts, has discouraged their growing and has gone so far as to say that this quarantine will be removed. That has stopped planting in many places.

While today we perhaps only have 15,000,000 bulbs in





California, had it not been for Mr. Torchiana's efforts we could have had a great many more than that. Now, this propaganda has been very definite in its effect, no doubt, and, I dare say, that some who appear here today unconsciously have submitted to that propaganda. Now, that has affected the supply. In spite of that some have had the courage to go ahead and plant and have shown that we have in the United States, perhaps, a thousand times more bulbs than there are grown in Holland. There are definite figures. (Laughter on the part of the opponents.) You may laugh, but I will ask the Department of Agriculture about that. I understand that there are but 1,500 acres of bulbs raised in all of Holland. The figures given here today will show that we produce many, many more times the number of bulbs in this country than are produced in Holland and that they can supply the demand.

Now, gentlemen, coming to the matter of retaliation. That is another bit of propaganda. I produce to you a letter written by Mr. James McHutchison to Mr. Thebault, of France. If this letter is not correct, I challenge him to correct me.

The letter reads:

"Dear Mr. Thebault,

"The Federal Horticultural Board has called a 'Plant



Conference' for April 19th in Washington. What the Board's plans are we cannot find out, but we believe they intend quarantining rose stocks and narcissus and possibly all other horticultural products unless they are blocked -- though allowing time for adjustments.

"Of course I cannot say that the Board intends embargoing your products, but your organization should do what it can to prevent it. I suggest three measures.

"1. Have your organization represented at the Conference.

"2. Send an entomologist or plant pathologist, who speaks English, and who can prove that the diseases your products might bring in do not constitute a menace to the vegetation of the United States.

"3. Have your Ambassador in Washington notify Mr. Hoover, Secretary of Commerce, and Mr. Wallace, Secretary of Agriculture, that an embargo on your horticultural products into the United States will mean an embargo of horticultural products from the U. S. into your country.

"I enclose copy of a letter which I sent to the members of this Committee, which will show you how the matter now stands; also an article by John Kingdon Smith which puts some defensive weapons into your hands.

"We will do what we can here, but we need your help, and



talk or letter writing will not get us anywhere.

"James McHutchison,  
"Chairman, American Florists."

Mr. McHutchison: Will you kindly give me the date?

Congressman Free: It appears in the "American Nurserymen" of May, 1922.

Mr. McHutchison: You have not the original letter?

Congressman Free: Do you deny that you wrote the letter?  
I can get the original?

Mr. McHutchison: Since that paper has been mentioned I would like to give an explanation to you and also to others, if you will give me just a moment.

Congressman Free: Go ahead.

Mr. McHutchison: The impression given is entirely wrong. First of all, it was addressed to our own firm in France.

Congressman Free: Mr. Thebault?

Mr. McHutchison: Addressed to Mr. Thebault, whom we had represented in France for twenty years or more. A number of letters had been coming to me in connection with the possibility of imposing economic embargoes if certain things were not done here. I sent a letter to him telling him what to do, not telling him to do himself but to address it to the right authorities. Since that was written to my own firm I think I had a right to say that. Dr. Marlatt will remember mentioning that to me sever-



The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles.

In the second part of the paper, the author discusses the results of the experiments on the structure of the atom. It is shown that the results of the experiments are in good agreement with the predictions of the theory of the structure of the atom.

The third part of the paper is devoted to a discussion of the applications of the theory of the structure of the atom. It is shown that the theory of the structure of the atom has many important applications in the field of physics and chemistry.

In the fourth part of the paper, the author discusses the future prospects of the theory of the structure of the atom. It is shown that the theory of the structure of the atom is still in the early stages of development and there are many problems that need to be solved.

The fifth part of the paper is devoted to a discussion of the conclusions of the paper. It is shown that the theory of the structure of the atom is a very important part of the theory of physics and chemistry and it has many important applications.

The author wishes to express his thanks to the members of the staff of the Institute of Physics and Chemistry for their help and assistance during the course of the work.

al years ago. I think I explained it at that time. Anyway, I am glad to be able to make this explanation now.

Congressman Free: In other words, you, as an American citizen, suggest to a foreign country, or to a citizen of a foreign country that that foreign country impose an embargo against our American products?

Mr. McHutchison: Not against our country, but to our correspondent in that country, telling him to address the proper authorities here. (Applause and laughter by the proponents.)

Congressman Free: I think I know the sentiment of Congress on the matter of these quarantines. Each year these different communities appear before us and ask for money to stamp out pests. We have appropriated rather liberally millions and millions of dollars. Congress places confidence in this Board. We believe they will do what is right. We expect them to enforce these quarantines. We are called here to appropriate money to stamp out these pests which are permitted to be brought in here with these products and which in turn disease the horticulture of the United States. I talked to Mr. McLaughlin of Michigan last night, who introduced the original bill for these quarantines. I want to say to you, gentlemen, that much of this that has come to us is simply stirred up by this propaganda of foreign interests, backed by so-called American citizens who tell them what



to do. I want to tell you that Mr. McLaughlin is behind you in supporting these quarantines and if there is any danger of this pest to keep it out. It is better to keep it out when we can do so. (Applause from the proponents.)

Congressman Swing: Mr. Secretary, Federal Horticultural Board and others, some years ago Secretary Wallace, about two or three years ago, gave out a list of fifty counties in the United States ranked according to the value of their agricultural production. Twelve of those fifty counties came from the State of California. Three of those twelve are in my district. My district is primarily horticultural and agricultural. We are tremendously interested in the work of this Board and the work of the Agricultural Department and we want to see these necessary and proper quarantine measures effectively enforced. California has suffered more than any other state in losses and direct expenditures of money in fighting foreign pests and ravages of foreign pests. It is because of that fact that we are tremendously interested in this matter. The editorial road here was, of course, of a humorous vein, intended to amuse the city population over its breakfast. The same sort of article could be written regarding all the health, sanitary and hygiene measures that are being taken by public health officers for the protection of human beings, but Science will march on to progress just the same, even in the face





of ridicule.

The position before this Board, as I see it, is this. The Board, after a series of hearings and consideration, made this order, I take it, and I assume it is true that the order was founded upon just evidence and upon facts, because it was approved by the Secretary of Agriculture. Now, we are here for the purpose of affording those who are opposed to that order an opportunity to be heard in protest. I thought, of course, that the evidence presented here would show clearly that all this infection in foreign countries had been cleaned up, that there was a new situation existing today, so that the order which was proper three years ago, would no longer be necessary because of a changed condition. The evidence, which would convince a layman, is that there is a changed condition, but it is a changed condition for the worse, because of the inspection, examination, and findings of our own governmental officials where these bulbs are being imported, show that the conditions today are worse than when the order was first promulgated. I am amused at the form that the evidence was presented in by the opposition to this quarantine. It reminds me of the story of the trial conducted by a young attorney. He found that his client was charged with stealing a suit of clothes and the prosecution offered two witnesses to swear they saw



him take the clothes, whereupon the young attorney brought in ten witnesses to swear that they did not see him take it. (Laughter by the proponents.)

We have found by inspection and by cutting open the bulbs that there is a greater infestation today than when the order was put into effect, whereupon the importers come here and introduce evidence through an able attorney that they did not see any of these infestations. That is the evidence which is before the Board. It seems to me, as was pointed out by the chairman of the Board, that this being true, that the condition is worse today than when the order was put into effect, the only issue is as to the condition of infestation in our country, as to whether or not there is likely to be a further infestation. The evidence shows that there are great areas in this country where they are growing them without infestation. It shows that there is some infestation in California. I have some bulb farms in my district. I am fully in accord with what was said by Chester Rowell, that California will stand by what it asks of foreign countries. Where we have infestation we will clean that up or else consent to an embargo against any exportation from our state. It is hopeless, useless, we submit now, to undertake to clean up those infestations when the Board permits re-infestation immediately, year



after year. Congress has appropriated large sums of money to fight these foreign pests and is willing to continue to do so, provided the leaks are stopped. (Applause from the proponents.) The ridiculous statement that employes of the Department of Agriculture were out planting trees to spread the gypsy moth in order to keep their jobs would not appear nearly as ridiculous as if this Board consents to the continued reinfestation of this country through these bulbs and then asks Congress for appropriations to fight the bugs after they have continued to be imported here. That would be a serious charge that would have some foundation. (Applause from the proponents.)

Mr. McHutchison: Will the gentleman yield?

Congressman Swing: Yes, sir.

Mr. McHutchison: I would like to ask one question. Are you in favor of allowing those same diseased bulbs to come in under special permit?

Congressman Swing: I am not in favor of permitting any infested bulbs to come into this country. (Applause from the proponents.)

Mr. Elliott: Will the gentleman yield?

Mr. Swing: Yes.

Mr. Elliott: The experts of the Department of Agricul-



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ture have stated that certain forms of this infestation, alleged to come in on Dutch bulbs, cannot by any known method be cleaned up. Is not California a little optimistic in suggesting that they will clean it up?

Congressman Swing: We have carried on a sort of voluntary experiment station and believe from the result obtained in the last year in the matter of getting rid of infestations that it can be done, and we agree, as Chester Rowell said today, to clean up or else get out of the business.

Mr. Vogelsang: Will the gentleman yield?

Congressman Swing: Yes.

Mr. Vogelsang: I only want to ask what your attitude would be should the same method of treatment be pursued in regard to foreign exportations?

Congressman Swing: Yes, sir. We have given them three years to clean up, and they are worse today according to the government report, than they were three years ago today. That is the attitude. (Applause from the proponents.)

Now, on that point that if we have a few<sup>a few</sup>/more won't do any harm, a reference was made to the 18th Amendment and it went over in the audience. Let me also make a reference to the 18th Amendment. Just because we have moonshine whisky in our country is no reason why we should permit foreign liquors to be smuggled



in across our boundaries and our international lines.

I simply want to say this to the Board. I am sure this Board has the confidence of all the horticultural interests in my section of the country. We are here, and I am here at their request and direction to uphold the remarkable, the good work this Board and the Agricultural Department has been doing, and we believe that this is a technical, scientific question which need not be decided by laymen but which must be decided by the experts of the Government, and when you have arrived at a conclusion and at a decision which is warranted by the facts, I am sure that the American people will uphold your decision.

(Applause from the proponents.)

Mr. A. M. White: I would like to have Mr. Hancock, a member of the Executive Committee of the State National Grange and the Farm Bureau speak to us. I think he represents the viewpoint of both. I think he will not be over two minutes.

Mr. H. B. Hancock: I happen to be president of the State Farm Bureau at Bridgeton, New Jersey, and a member of the State Grange. I am going to admit at the beginning that I do not know anything about the bulb business, but I have learned a lot today. There is one slant, ladies and gentlemen, that you have forgotten. There is one problem you have not touched on which touches, I would say, 95 per cent of the farmers of the





country, and that is the rising cost of production. These different pests that have come into our country have increased the cost of production. I will take you back to a New Jersey farm of 50 or 75 acres, a peach orchard and a vegetable farm. Think of the pests that the farmer has to contend with. Think of the Japanese beetle, the coddling moth, the Oriental/<sup>peach</sup>moth, the red bug, the red spider, the red, green and black aphids, and so forth. With respect to the vegetable part of it we have the cut worms, aphids, maggots, thrip, leaf hoppers, and so on. I wonder if the ladies from the metropolitan sections/<sup>if they</sup>knew about those things, would not stand 100 per cent against anything like that coming into this country. The ladies of the Farm Bureau and the Grange of the United States, constituting over a million and a half members, are back of this Department of Agriculture and we are going to stand back of it. We believe in America first and we are going to stand on that principle, and we want you men to give way to the 95 per cent of the farmers in this country who produce necessary foodstuff on which the people of this country live.

Mr. A. C. Hardison: I am a member of the committee selected by the Secretary of Agriculture of California to represent the state at this hearing. I also happen to be a fruit grower of California, and I happened to have been until just about a week



or ten days ago, president of the California Farm Bureau Federation. I am also a member of the executive committee of the American Farm Bureau Federation.. Your attention has already been called to the fact that the dangerous pest is the unknown and unimportant pest in his native environment. But when that pest is moved or transplanted into a new and more favorable environment he becomes a very dangerous and serious pest. California today is suffering from the ravages of the San Jose scale. It is suffering from the red scale, the purple scale and numerous other scales, which enter into the country and are almost insignificant. Yet today those engaged in the citrus industry are expending nearly 10 per cent of what the producer receives in commercial control of those introduced pests. In other words, if the farmer could retain that which he expends in the control of introduced pests agriculture would be one of the most profitable businesses in the United States today. It is interesting to note that the United States Department of Agriculture has stated that practically 90 per cent of the pests of this country are introduced pests. What are we attempting to do to prevent the introduction of new pests? It took the Congress of the United States a number of years to pass legislation authorizing the establishment of quarantines. We have attempted by means of this legislation through the Plant



Quarantine Board to raise a barrier against further importation of pests.

Our experience in California, where I believe the principles of quarantine were first put into practice in the United States, has rather definitely shown us that inspection is not a perfect barrier. In other words, as a rule, inspection, by reason of its nature, can only be superficial. Insects and their eggs which are not visible to the naked eye cannot well be discovered. It therefore follows that a quarantine should be established to prevent the entrance of those plants infested with pests or presumably infested with pests, that are liable to do damage to the agriculture of this country. Producers are spending a large percentage of the gross receipts in combatting or endeavoring to commercially control these very pests, that the quarantines have been erected to keep out. We, in California, have even gone so far as to place a quarantine against counties. We find it commercially necessary. I know one county in California where one of these introduced pests has reached such a state of resistance that it is almost impossible to kill it by fumigation. The orchards of that locality are fumigated twice a year and yet at the end of the year the infestation is equal to what it was at the beginning of the year. Some method, new method, must be discovered to control the pest; otherwise





the producers will have to go out of business.

The producers of California are interested in the strengthening of the quarantine. The producers of the United States are interested in strengthening the quarantine. The California Farm Bureau Federation adopted a resolution, asking that the quarantine be strengthened. The American Farm Bureau Federation at an executive meeting, held some two or three months ago, adopted a similar resolution. The American Farm Bureau Federation represents about 41 states, the producers in 41 states, not the nurserymen, not the importers, not the merchants, not the people who live in the cities, but those who live in the country and upon the farm and who are interested and who are producing the foodstuffs so essential to your sustenance.

The State Grange of California and the National Grange now in session in Sacramento recently adopted similar resolutions; and we ask that the matter of quarantine be placed in the hands of the Federal Board, in whom we have the utmost confidence. They have at their command the technical ability of the United States. Quarantining is essentially a technical business. We wish to place behind them the support of the producer in carrying out their recommendations. (Applause from the proponents.)

A.

Mr. Lee/Strong: Ladies and gentlemen, I merely want to subscribe to the program announced by Mr. Rowell for the Cali-



ifornia Department of Agriculture, that we do not ask for any special privileges in California, in the matter of quarantine. We expect to have the same restrictions imposed against us when we have the same pests, the same restrictions that are placed against foreign countries or other states. I say that we will make every effort to clean up or to go out of business, as pointed out by Mr. Rowell. As an evidence of good faith, I wish to say that we have worked for two years on cleaning up infested bulbs with good results. I anticipate that those efforts will be extended to practically all sections.

We are making an honest effort and we feel we are entitled to the chance to continue. We ask that this quarantine be placed. We ask not only that it be not weakened but that it be extended to any class of bulbs which presents a potential menace to this country. (Applause from the proponents.)

Mr. Frank C. Riggs: I realize that the time is growing short and therefore I will be brief. To follow the lead of the gentlemen from California, in saying that the bulb growers in the Pacific Northwest, whom I am representing through the medium of the Northwest Florists' Association, which includes the entire florist business of the Northwest and some of the bulb growers, who are a unit on the idea of cleaning up our stocks, we have already adopted the hot-water method of treatment and





nearly all of the stocks we planted this year have been so treated. We are aware of the importance of this danger, of the importance of those pests which are still coming into the country. I have not had the pleasure of having spent as many years in the bulb business as some of the gentlemen who testified yesterday. As a matter of fact, this is somewhat of a new venture with us. In the Northwest there are something like 15,000,000 bulbs which have been planted in the ground this year. But as to these gentlemen who testified that they were unable to see any narcissus flies, I am glad to say that in my short experience with these bulbs I inspected a shipment of some 400 cases of bulbs which were unloaded at Portland just before I left to come to Washington and there was quite a considerable infestation. I am not able to say just what the infestation was because the records had not been made up before I left. Some of the bulbs were cut open. Even one fellow liked the climate so well that he emerged and came out to take a look at the climate.

There is just one other feature of this infestation that interests me very much. We have in the last few years in Portland been afflicted with the earwig. I do not know whether any of you people know what the earwig is, but if some of the ladies who do not seem to be much interested in bugs could only get



acquainted with that little animal I believe they would have more interest. It is a bug which gives a lot of trouble in England. The way it gets its name is that it is supposed to crawl in your ear. That is a nice thing to think about, isn't it? It would not be a very nice thing to wake up in the morning and find an earwig on your pillow. You can just wonder what he might do to you. You may not be interested in bugs as applied to the growing things of this country, but when it comes to a bug which comes as close to the human as his ear you may become interested.

I have a lot of documentary evidence which I brought here in the form of letters, showing that we can grow bulbs in the Northwest. I am not going to submit them but I ask that they be made a part of the record.

Among our growers we have many who are rejuvenating forced bulbs. One grower, particularly, has been doing so for 25 years. Another man in Victoria, B. C. --- that is out of this country but is so near to us that it can really be considered in this connection --- has been doing the same thing for 30 years,

I think that what I have said, together with the documentary evidence, is about all that I want to say.

Now, with respect to the Japanese beetle, that is another thing. For many, many years, I think 60 or 75 years, we have



been importing Japanese iris into this country. However, it has only been within the last few years, the last four or five years, that the Japanese beetle has made its appearance here. A good many pests and diseases which in their native habitat do relatively little harm seem to thrive in this country and become very destructive. I thank you.

Mr. Thomas J. Headlee: Mr. Chairman, my story will be short because nearly everything that can be said has already been said. I have with me a letter here from the Secretary of the New Jersey State Department of Agriculture which he has asked me to present to this meeting, by direction of the New Jersey State Board of Agriculture. This letter reads as follows:

"By direction of the New Jersey State Board of Agriculture I am respectfully calling to your attention the benefits which we believe will accrue to the producers of the Federal Horticultural Board's quarantine 37. The bulb industry in the State is just getting on a substantial basis, and we believe that this offers an opportunity for some of our progressive growers to produce bulbs for the general market. We believe furthermore that with the development of this industry in America there will be less risk of introducing dangerous insects and fungous pests. The competition that will develop from a large number of growers entering the field will bring the price to a satisfactory basis





in our opinion, and cause no hardship to any one concerned with the production and distribution of these bulbs and flowers.

"The State Board of Agriculture is, therefore, strongly in favor of making this quarantine effective as planned."

My point of view is that of a professional entomologist employed by the State of New Jersey as such, and having had about 18 years of experience in that state.

The study laid down by Dr. Cobb, showing the distribution of this eelworm (*Tylenchus dipsaci*) is an indication of a relatively rapid increase in extent of distribution from both extensive and intensive standpoints. As I understand the data from which these charts were derived, Dr. Cobb was informed, in one way or another, by citizens interested in plants, and specimens were sent to his office for identification in various ways. Now, that means that as the years have passed the infestation by this eelworm has become greater so that the attention of the individual citizen has been directed to the injury, and his attention having been directed to the injury, he has attempted to find out what the cause might be and has therefore collected and sent material to Washington for determination and identification.

Now, that story means to me, as a professional entomologist, that there has been a steadily increasing distribution of



this eelworm and that for the last three years we have seen a marked acceleration in that direction. That means to me that if we allow conditions to continue as they now are, it seems to me, that the acceleration in the distribution of that eelworm, from the standpoint of extension to territory covered, from the standpoint of intensiveness of infestation, will increase. The acceleration will then become constantly greater until the entire country is infested.

Now, I have not made any particular study of eelworms. It has been my experience that you cannot be a specialist in many lines. I have not had the opportunity. We all regard Dr. Cobb as the authority on that particular subject in this country. I looked into the question of combatting this thing, consulted with the Department men who were concerned with it, and listened to the presentation that was submitted here yesterday.

It seems to me that there are possibilities of great danger. It seems to me the case of the people who are in favor of leaving the quarantine as it is has been well stated. The infestation of the eelworm and the bulb fly is here. However, it is not universal. It is not yet too late; and certainly since efforts are going to be made to clean up those infested sections, as has been stated here, it would be the wildest folly to allow it to come in from foreign sources.





I, personally, knowing something of these insect pests, have no doubt that this eelworm and these bulb flies are not indigenous to North America, but are European in their origin. I do not doubt that. It seems to be clear-cut. If that is so, then if we will allow infested material to come in from foreign countries we have no chance to hold it down or get rid of it here.

Do you realize that within this country now we have an area infested by the Japanese beetle, involving portions of the State of Delaware, eastern Pennsylvania, and all the southern part of New Jersey, and that hundreds of thousands of dollars are being expended now to keep that Japanese beetle from passing into surrounding<sup>un-</sup>infested territory. Do you realize that owing to the failure of this country to have the Federal Horticultural Board some years ago we got an importation of the gypsy moth on blue spruce from Holland or Belgium. We have not been able to locate just which source it came from. It got into the Duke estate at Somerville, N. J. Now, that thing came in on blue spruce. It was on that blue spruce for a number of years without manifesting its presence particularly because it does not care especially for blue spruce. Presently however it got off the blue spruce and when it was discovered had covered an area of 500 square miles and there were 15 outlying infestations.



It has <sup>cost</sup> one-quarter of a million dollars a year to carry out exterminative measures against that gypsy moth in the State of New Jersey. Today, as a result of examinations made last winter and spring, we know that there are nine colonies in the State and 80 egg masses, as compared with three or four million egg masses and one thousand colonies in the year 1920. Now, to handle a situation of that kind it costs a great deal of money.

We do not know what the Tylenchus will do. I do now know. The record of Tylenchus is bad. I don't know very much what these bulb flies will do. However, the men who studied it tell me the danger is great. Why should we allow this stuff to come in from foreign countries when we are now preparing to spend large sums for the control and eradication of the pests and diseases which are already here? Doing that is simply a case of letting the stuff in one way and sweeping it out another. It is folly. Either we should do one or the other. The statement has been made here that it has gone so far now that to let it go further will not do us any harm. However, it has not gone beyond remedy. We will take hold of the situation and we will control it and extorminate it within our borders provided the leaks are stopped, provided steps are taken to prevent its further entrance into this country. (Applause by the proponents.)

Mr. Roeding: May I have the floor for a few minutes?

In my opening remarks I failed to state that our committee, in



addition to representing California, is also representing twelve western states, and I would like to have the privilege of placing in the record the telegrams received from these western states, giving us that authorization. /

(In accordance with that request, the following telegrams are quoted:)

"Phoenix Ariz Nov 10 1925

"G. H. Hocke

"Director Department Agriculture Sacramento Calif

"Impossible to meet you in Chicago November Sixteenth Arizona heartily endorses action late Sacramento convention request you fully support all measures to strengthen Federal Horticultural Board.

"T. S. Bishop

"Commissioner of Agriculture and Horticulture Arizona."

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"Helena Mont Nov 10 1925

"C. H. Hocke

"Commr of Agriculture Sacramento Calif

"Re quarantine this matter taken up with Senator Walsh and Wheeler Representative Leavitt and Evans They assured me they would watch all quarantine matters that might arise regard to horticulture you are at liberty to represent me at Washington





as being opposed to modification of present Federal quarantine law.

"A H Bowman  
"Commissioner of Agriculture Montana "

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"Boise Ida Nov 9 1925

"G. H. Hecke

"Sacramento Calif

"I fully agree with action taken by your conference looking to support of Federal Horticultural Board and quarantine regulations by states Please request committee supporting above at Washington D C to act for the State of Idaho Please advise Committee that they will find Congressmen and Senators from Idaho friendly to Horticultural Board Senator Gooding is member Senate Agricultural Committee and desires to be informed of situation

"KJOSNESS  
"Commissioner of Agriculture Idaho."

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"Boise Ida 1123A Nov 10 1925

"W. C. Jacobson

"Department Agriculture Sacramento Calif

"As president Western plant Quarantine Board and quarantine official Idaho authorize committee appointed to act behalf western plant industry giving best possible protection We protest



against lifting of any protective embargo

"M L Dean,  
"Chairman, Western Plant Quarantine Board. (11 western state.

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"Olympia Wash Nov 9 1925

"G H Hecke

"Director of Agriculture Sacramento Calif

"Your telegram today Department of Agriculture State of Washington stands squarely back of Federal Horticultural Board in all just and necessary quarantine measures Your committee is authorized to represent us at Washington conference along these lines.

"Erle J. Barnes,  
"Director of Agriculture Washington "

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"Salt Lake City Utah Nov 9 1925

"G H Hecke

"Director of Agriculture Sacramento Calif

"Impossible to have representative Washington Sixteenth Utah supports Federal Horticultural Board to the limit in quarantine measures and protests vigorously the attacks on said board Government can do nothing more beneficial for agriculture than to guard our shores from threatened insect pests Yourself and committee are authorized and requested





to represent this state at hearing on sixteenth      360  
fight      Make a big

"Harden Bennion    Commissioner of  
Agriculture, State of Utah."

- - - -

"State College N Mex    Nov    9    1925

"G H Hecke

"State Director of Agriculture    Sacramento Calif

"New Mexico unable to send representative to conference on  
narcissus bulb quarantine by Federal Horticultural Board  
Request California Committee present our protest against at-  
tack on Boards action    Urge Board action shall stand and  
Board be supported in regulatory work    Insist Board should  
be unhampered in effort to protect agriculture of country  
Attack threatens entire structure of protective work and  
therefore dangerous    Want Board left unchanged and policies  
fully endorsed as absolutely essential.

"H L Kent, President New Mexico  
College of Agriculture."

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"Reno    Nev    Nov 9    1925

"G H Hecke

"Dept of Agriculture    Sacramento Calif

"We are entirely in favor of just and reasonable quarantine



measures by Federal Government with continuance and support of Federal Horticultural Board to that end and committee may represent us to that effect

"Edward Records

"State Quarantine Officer Nevada."

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Assistant Secretary Dunlap: Are there any others who care to be heard?

William L. Hill: I would like to read the following statement:

"I am Private Secretary to Senator Duncan U. Fletcher of Florida who being unavoidably delayed in reaching the City has directed me to appear before you at this hearing and say in his behalf that, based upon the order of the late Secretary Wallace made December 18, 1922, under which, on account of grave pest dangers, it was proposed to add the narcissus bulb to the 'restricted' importation list, to become effective January 1, 1926, a number of his constituents, relying upon the provisions of the amendment to Quarantine 37 and having full faith and confidence in the experiments and investigations previously and since made by well known authorities and representatives of the Department disclosing that the importation of these bulbs was attendant with an element of



grave danger of bringing additional pests into this country. began to engage in and develop the growing of bulbs, until now there are several thousand acres in cultivation -- in Florida alone, where the soil and climate are so well adapted to the industry.

"Further, that aside from the dangers pointed out by the Federal Horticultural Board if further importations are not restricted the Department should, and he believes will, take into consideration the encouragement given Americans to engage in bulb growing, based upon the order of former Secretary Wallace; and that any modification of the Order - after due notice of its intent and purport was given all concerned, including foreign growers, American importers, wholesalers, jobbers, retailers, and the general public, would bring about chaos and to a certain extent discredit the Department - in fact, it would be considered no less than a breach of good faith with those citizens who have so loyally responded to the encouragement of the Department to engage in the industry.

"And further, that no person can now say that he was not given sufficient notice that the bulbs would be placed on the 'restricted' list next January; and that unless evidence is submitted at this hearing which satisfies the Department beyond every reasonable doubt that there is now no danger in





the further unrestricted importation of such bulbs, it will be incumbent upon the Secretary to promptly put into effect the provisions of the Order made about three years ago.

"The Senator directs me to say that the questions at issue are:

"(1) Is it true, as heretofore found by experts of the Department, that the importation of certain bulbs is attendant with an element of danger of bringing in of pests detrimental to the agricultural and horticultural interests of this country? If so, their importation should be prohibited.

"(2) Would it be fair, after having given the interested public due notice that further importations of the bulbs would be restricted and after having encouraged the development of an important industry throughout the country, now or soon to be so extensive as to supply all requirements, to even modify the provisions of that order?

"A number of the Senator's constituents are engaged in the growing of bulbs on a commercial scale and each and every one opposes modification of the Quarantine Regulation, for they have demonstrated that the Narcissus can be grown satisfactorily on certain types of Florida soil and heavy plantings have been made in anticipation that the further importation of these bulbs would be restricted.



"The Senator directed me to bring to your attention the following excerpts from a Press Service Release issued from the office of the Secretary of Agriculture under date May 1, 1925:

"The important bulb which, on account of grave pest dangers, will be added to the "restricted" list, beginning with 1926, is the Narcissus (Daffodils, Paperwhites, etc.) Certain other bulbs of minor importance will also be placed on the restricted list with 1926.

"The exceptional risk from importations of Narcissus Bulbs was also clearly brought out at this conference (Conference held at the Department October 30, 1922) and was the basis of the decision to bring this class of bulbs under restriction at the end of a three year period. The late Secretary Wallace, in announcing the determination of the Department following the Conference, pointed out, with respect to this action, that the continuance of the risk through such imports could be justified only for such reasonable time as should be required to establish the commercial production of these bulbs in this country.

"As already indicated, Narcissus bulbs have proved to be the most frequent and abundant carriers of serious pests - pests which are not only destructive to bulbs but also are





reported to be even more damaging to important field crops, and these pest conditions still obtain or, if anything, have increased since 1922. While it is true that a hot water treatment for these bulb pests has been worked out by the Dutch and English authorities which enables them to so disinfect their seed or planting stock as to limit the losses in field culture, this treatment has not prevented a considerable remaining infestation in the crop produced. Furthermore, the treatment is inapplicable to the type of forcing bulbs which is the ordinary article of import into the United States, because, as the Department is advised by the Dutch authorities, it seriously reduces flowering and renders the treated bulbs practically worthless for forcing. The more important of these pests are two bulb flies and an eelworm or nematode.

"The bulb flies, particularly the smaller one, are found in practically every commercial shipment of Narcissi from Holland, in some instances infesting as much as 12 per cent of the bulbs, and individual bulbs have contained from 50 to 75 grubs each. In Europe this bulb fly is reported to be a serious enemy not only of ornamental bulbs but also of the onion, and to have occasionally destroyed entire crops of that vegetable. This pest has now gained some foothold in the United States, chiefly in connection with bulb production,



but has spread in at least one instance to onion fields.'

"May I not insist on behalf of Senator Fletcher and his constituents that in view of the previous findings of the Department, the notice given all concerned that the importation of Narcissus Bulbs would be restricted beginning January 1 next, and the encouragement given our citizens to engage extensively in the industry, which they have accepted, it would not be fair for the Department at this late date to even modify the provisions of Quarantine No. 37 as revised by the late Secretary Wallace.

"The Senator has full faith and confidence in the ability of the Federal Horticultural Board to determine whether the further unrestricted importation of Narcissus Bulbs should, in view of grave pest dangers, be permitted, and in view of the information contained in my quotations from the Press Release above believes that the Secretary of Agriculture will not modify the Order.

"I thank you for this opportunity to express the views of Senator Fletcher on this important subject."

Mr. E. J. Adams: I am secretary for Senator Stanfield of Oregon. In the Senator's absence I wish to record the protest of the bulb growers of Oregon against any change in the policy of the Department to let down the quarantine on January





1, 1926, for two reasons: First, they do not want bulbs or anything else to come into this country with infection. Second, our people have taken steps to meet the needs and requirements of the bulb users of this country by going into the industry extensively.

The disposition displayed yesterday by the importers of bulbs, showing a prejudice against American grown bulbs in preference to foreign grown bulbs would amount to this, that the investment made by our people in bulb growing would be entirely destroyed if your quarantine does not become effective January 1. That would be an unfair thing to our people in building up this new industry. The people in commerce were given three years to prepare for this quarantine. During all of that time the infected bulbs have continued to flow into this country, and that condition prevailed for the purpose of protecting the interests of the importers. They have had their chance. Now, the people that have prepared to engage in the production of bulbs to meet the demand in this country, are entitled to their rights and their protection by having the quarantine go into effect as planned, January 1, to say nothing of the constant incoming of infected bulbs. Our people take that position. They want this order to go as planned. The greatest embarrassment to business of all kinds, agricultural





or otherwise, is uncertainty. For three years the people of this country thought that they could raise bulbs and they have been raising bulbs and they have been preparing to grow more of them. Now, the uncertainty of not having the quarantine go into effect on January 1 is a blight to their hopes and a possible destruction of their investments, particularly so when you take into consideration the disposition of the importers as displayed here yesterday to the effect that they were not interested in home grown bulbs but that they wanted Dutch bulbs. But the big thing is that we do not want infected bulbs or anything else flowing into this country. The proposition made by the attorney representing the importers and foreign interests, made yesterday, rather shocked me -- I don't know that it was a comparison --- but he said that we had already this infection and that a few million more or less does not make any difference. If we had an invading army from Japan or any other country we would not care to have it reinforced by others from abroad. We would rather keep the army that we had and lick them, rather than permit them to bring in reinforcements. It is the same proposition with the bulb flies. They constitute an invading army and we donot want them to be established and reinforced. I prefer to lick the army of flies now, as they are at present, without reinforcements.



When he threatened us with an embargo upon our apples it did not make a dent in the producers of Oregon because we don't care to make any bargain with any country on earth whereby we are to receive infected bulbs or plants on the condition that they take infected fruit from us. We have no infected fruit to offer. We do not want anybody on earth to take infected fruit from us. If any country on earth desires to place an embargo on the big, red apple of Oregon because we do not take their bug infested bulbs, why, we would rather have their embargo than to submit to an invading army of bugs from abroad.

Assistant Secretary Dunlap: Are there any others who care to speak on sustaining the quarantine? If there are no others I wish to say at this time that there has been just about as much time used by one side as by the other. The folks yesterday used three hours and 15 minutes and the folks today used about three hours and 47 minutes.

I wish to call your attention to the fact that I presume you expect the Secretary to read all of this testimony which has been offered. Seven hours and 35 minutes of reading, together with other things which he has on hand, not to mention the mass of material which has been submitted and filed. However, I do not want to bring this meeting to a close until everybody has had his say. I wish, however, that you would from





now on make your remarks right to the point and be as brief as possible. I know that there are a number of people here who want to get away. I know that their time is valuable as well as ours. Let us confine ourselves from now on to brief speeches and let them be absolutely to the point.

Mr. A. M. White: May I suggest that we have no questions now, unless the other side wishes to raise some. However, I suggest that if they have any questions that they be written out and be first submitted to the Chair in order that he may determine whether or not they should be taken up at this time.

Mr. Vogelsang: Do we not intend to have an adjournment for luncheon?

Assistant Secretary Dunlap: That is hardly necessary unless there is a good deal more to be said.

Mr. Vogelsang: I have had no opportunity to confer. I think that we have a case to present in rebuttal, to some extent, and that will take some little time. I think we will make it as short and snappy as possible, but I certainly have offered no objection to the reading of a great deal of matter that possibly should not have gone in on the theory that we are not discussing in general terms quarantine No. 37 but merely the bulb question. A great deal of time, however, has been so exhausted. I am sure, although I have not consulted with the various gentle-



men present, that there will be something said in the nature of rebuttal. I think that in order that we have a complete and logical record of this thing that such rebuttal testimony as is available should be offered and should be offered in proper time, and I think an empty stomach is not the way to do it. I think also that a reasonable opportunity to confer is also proper.

Assistant Secretary Dunlap: I will be very glad to come back later. I leave the matter up to you folks. I leave it up to you as to whether you want to go ahead and finish or want to recess for luncheon.

Mr. Vogelsang: I move that we recess until 2 o'clock.

A Speaker: I second the motion.

Assistant Secretary Dunlap: The motion has been made and seconded that we adjourn until 2 o'clock. As many as are in favor will say Aye and those opposed will say No. (After taking the vote) We stand adjourned until 2 o'clock.

(Thereupon, at 1 o'clock p. m., an adjournment was taken until 2 o'clock p. m.)

#### AFTER RECESS.

(Met, pursuant to adjournment, at 2 o'clock p. m.)

(Mr. T. J. Irvin, manager of Buckfield Plantation, Yemassee, South Carolina, left with the reporter a paper which he desired to be copied into the record, but which he did not wish to read



to the conference, in order to save time. In accordance with this request, the paper referred to is quoted below:)

"The facts as they exist at Buckfield have been presented by Mr. Freedman. I wish, however, to add a few remarks in addition to what has already been said. First, I am thoroughly convinced from what I have heard and seen here that we farmers who have gone into this industry need the protection of the Department of Agriculture, not only against pests but to protect our interests in what is likely to become a great American industry.

"Secondly, I wish to state that these farmers who are engaged in this industry need the protection of the Department of Agriculture, as they have invested their capital in this business as a livelihood, because of this embargo and to attempt any change at this time would deprive them of their business and render a great hardship.

"As far as raising bulbs are concerned, it has been said that we are not capable of raising the right kind of bulbs. I don't think there is anything on God's green earth that America can not do. The manner and magnitude in which we do it sometimes hurts, but that we can not help. That is part of our nature to do things in a big way and if the ladies will just be a little patient with us and put a good word in about





this new American industry, we farmers will give them more narcissus flowers than they ever dreamed of in 1925.

"If any lady or gentloman here is doubtful as to how far the American farmer has gone into the raising of paper whites, I suggest that they come to Yemassee, South Carolina, and they will see what was an abandoned rice field, full of cypress stumps, inhabited by frogs, alligators and moccasins, when in a few short weeks will be a beautiful flower garden of two hundred acres of narcissus flowers, and a sightseeing place of the South.

"We have arranged to put traffic regulations to direct automobiles so as to relieve congestion in our bulb field on Sunday. Quite a revelation for an old abandoned rice field. I mention this fact only to show you to what extent we have gone into this industry. We have ten miles of our own railroad to assist us in the production of these bulbs. We employ sixteen white families, and, during the planting season harvesting and grading we have employment for about 150 hands. The reclaiming of these isolated black lands in the swamps of South Carolina has been through the introduction of narcissus bulbs, ~~hazz~~ turned into a place of life and industry.

"Considerable time and money have been spent at Buckfield, which is and will be a big success, if we are left



alone. We farmers will master it in that good old American way, and we are here to place our interests in your hands feeling sure you will protect our interests in this instance as you have in the past. You have helped us start in this business and we ask your protection."

Assistant Secretary Dunlap: We are now ready for the rebuttal as presented by those who are opposed to the quarantine. I will ask that those who wish to speak please confine themselves to matters which have already been discussed and not to talk about new matters or to introduce any new material.

Mr. Pierson: Mr. Chairman, ladies and gentlemen of the conference, I, first of all want to congratulate Mr. White on this wonderful smoke screen which he has thrown over this conference. I think it is a very admirable smoke screen. I understand that we came here to talk on the exclusion of the narcissi bulbs. However, after the smoke screen had been properly thrown over the meeting it developed into a conference on the economic development of agricultural products. After that it became a foreign advertising forum. However, when we get right down to the matter, there is but one question before us, and that is Does the importation of narcissus bulbs constitute a menace to American agriculture? If it





does, I say to you, on behalf of the American Horticultural Societies and on behalf of every one interested, that they should be kept out; otherwise not.

Now, in matters of quarantine the burden of proof is on the government. It has got to be proven that it is a menace to agriculture. The Act says that they have a right to exclude plants and bulbs from little-known regions, bringing in insects, not new or widely distributed throughout the United States. According to the argument of the Department in its presentation of the subject yesterday morning, I think we were pretty well advised that these insects were widely prevalent in the United States, so that the Department is not justified in the exclusion of these narcissus. The matter is not for the Secretary to decide as to whether we want the bulbs, whether the importers want the bulbs, or whether the growers want to grow bulbs here in this country. If this is going to be an economic measure and discussion from an economic standpoint, that is another thing. The real question is whether the Secretary agrees with the decisions of the Federal Horticultural Board. If he does, after careful consideration, then we are in his hands, but the matter has got to be proven, that there is an economic necessity for that exclusion, and that they are a menace to American horticulture.



Now, I don't think that they are a menace to American horticulture because these bulbs have been permitted importation since 1918, when the Federal Horticultural Board was first established. (Note by the reporter: Very likely Mr. Pierson intended to say 1912.) Even since the program was adopted in 1922, they were even then permitted importation for the purposes of propagation. Now, there were more bulbs brought in, I think it is fair to say, for propagation purposes, in that period, than would normally reach our agricultural districts in ten or fifteen years. It is conceded, I think, that 80 per cent of the bulbs used in this country have been used for forcing purposes and the bulbs were then destroyed in one way or another. Under the normal, ordinary system of importation, the menace does not exist, for the distribution of these bulbs over the United States is very, very limited. Now, if the Board was right in permitting entry of these bulbs for propagation in the last three years any damage that might occur has already been done. We, therefore, claim, under the circumstances, that there has not been a very decided case made out that these bulbs are a menace to American agriculture. I think on that point we might rest our case.

I have a very high regard for the personnel of the Federal Horticultural Board. I think they are animated by the high-





est motives, but we look at this thing from a more practical standpoint and we would like to have the Secretary of Agriculture review this subject and determine whether or not the further importation of bulbs is a menace to the agriculture of the United States. If they do not constitute such menace then they should be permitted entry. If they do constitute such a menace then, they should all be excluded and no special permits of any kind should be granted. (Applause from the opponents.)

Mr. Vogelsang: I believe that the gentleman who has just spoken has stated a great deal of common sense in a very few minutes, and has outlined, in my judgment, the question before the Department.

I merely wish to make a preliminary statement for a moment and then call upon certain gentlemen to make their statements. I could not help feeling, and I think most of you gentlemen must have felt, that the discussion this morning went very wide afield from the limitation that has been placed by the Secretary upon the purpose of this hearing, and that we have before us the question of continuation of importation of these bulbs. We believe that the question of tariff protection or its equivalent is entirely foreign to the Department of Agriculture. The quantity of bulbs planted in this country; the beauty and profusion of their production, now or later on, is not in the





question. If my state and if the State of Florida and these other states can do as well as they are representing, they have nothing to fear from the competition of the foreign bulb growers from an economic standpoint.

Now, the Act under which we are working and under which the embargo is laid is entitled: "An Act to regulate the importation of nursery stock and other plants and plant products; to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests; permit and regulate the movement of fruits, plants, and vegetables therefrom, and for other purposes." The purposes of the quarantine are first, that it must prevent the introduction into the United States of insect pests and plant diseases which are new to or not heretofore widely prevalent within or throughout the United States. Now, that is the issue for which we are here and I think we have confined ourselves to that point, and I think that the evidence that has been produced here from the Department itself and which is in the exhibits which we have in the case, conclusively proves the widespread dissemination of these alleged diseases and pests, these three pests an un- over the United States, during/limited period of time, probably a hundred years, and at least fifty years. We believe that the evidence shows that the establishment of these diseases and



pests is now fixed and where it is fixed its eradication is going to be just as difficult in any part of the United States as it is in the countries where the bulbs originate and where the pest is said to first have been found, although that is questioned; that is disputed by our own scientists. However, that the Tylenchus is perhaps an American pest and that the bulb flies have been known for a great many years and possibly are also of the American fauna is in the record.

I also want to say that we have not indulged and we hope not to indulge in anything of a personal nature or of an unpleasant character. I want to say this, however, that my recently made friend from New Jersey, Mr. White, to whom I have not had an opportunity to speak privately, was quite happy and somewhat facetious this morning in some of his references and placed a great deal of stress upon the propaganda that had been issued, and was uncomplimentary enough to say that he greatly feared that this array of magnificent and noble women that came here, whom we have never seen before, -- I do not know one of them personally -- were influenced totally by the machinations of some concealed battery of newspapers or news writers, possibly financed by an alleged fund of which, I pledge my word, I know nothing, and I know no one else does, and which is non-existent, being a mere





figment of some one's imagination. It is not well to poison an otherwise rather distinguished and high class session with any such stuff as that. However, I will call upon a gentleman in to make some remarks/~~that~~ respect on his own account.

I intend to offer for the record and I trust it may be admitted, the constructive criticism which has been referred to in rather uncomplimentary language. Whether or not it has caused the galled jade to wince or whether it contains a truth rather annoying, I wish to say that I read this before as a friendly act. It was handed to me some months ago by one of the editors of it and I read it then and I marveled at the great temperateness expressed throughout. I have read it more carefully since I entered into this case a couple of weeks ago, and I want to say, as a plain, ordinary, comparatively decent American citizen, that it is just about as fair a statement of that proposition as can be made by any one, and I do not see how the opposition can criticise it from any other basis than that it is not on their side of the case.

I would like to answer, while I am on my feet, a question that was put to me by the Congressman from California relative to the embargo of Holland. It is not material here at all, but I could not answer the question yesterday and I made some investigation. I understand now that the Holland



embargo against woody plants of the United States was laid in the year 1898 and was placed at that time owing to the fact that the adjoining country of Germany was in great fear of the San Jose scale coming from America and insisted upon a like embargo in Holland, fearful that it might get over the line to Germany. Holland was in no position to refuse that because her products moved over that line very largely, and it was a matter of very great economic importance to that country. Now, the Holland importations of American plants, however, was never significant and it practically fell finally into total obsolescence and was finally lifted in 1922 by Holland. We might say that that was done in order to remove criticism that might be leveled against her because she was insisting for relief on this embargo. In fairness, I think that should be said.

I might make another reference here to the comparison between canker which came into this country some years ago and developed into a virulent pest of great consequence and the pest and diseases now under consideration. To compare that with the present infestation complained of is like a comparison between the disease of cholera with ordinary cold in human beings. No similar condition is likely or in all human or divine probability likely to arise. That lies in the fact that these importations have been continuous for all of these years and these



things are in this country and always will remain there.

I do not, however, listen to any one with more attention and appreciation, both in his spoken and in his written word, than a very eminent citizen who spoke this morning in the person of Mr. Chester Rowell. I know his character is of the highest. The furthest thing on earth from his intention would be to give a wrong impression to any one, and while, in so far as his remarks disagree with the position that we have assumed here, I think it is very largely due to the lack of information on the subject on his part. I want to say also, so far as he is concerned, that we would not refer to insects and politics as twin pests if the politics of Mr. Rowell were the rule instead of the exception in this country.

The fact remains, it has not been shown this morning that the Department is justified in placing this embargo. As a matter of fact, all of the testimony upon which this case will be decided is practically in your hands, was long ago, was in your hands yesterday morning, because you made the case yourselves for the quarantine. You have what we believe and what should be the honest and impartial reports of honest and impartial men in the employ of the Department of Agriculture. That is the issue that we are called on to meet and that is with reference to the pests themselves. The economic question is





another story. It is a horse of a different color. It enters not into this proposition in the slightest degree, in our judgment, but we must take notice of it this afternoon in order that some of the statements may not go utterly unchallenged, but in my opinion it is an entirely extraneous matter to the question in hand. Now, we have met, I think, in the record and in the testimony this question of the pests as well as we could. To be sure, we are under, as you will readily admit, a handicap, because we had no access to or knowledge of the researches of the Department itself until yesterday morning when we sat down here and they were given to us in mimeographed form. They call for study and call for careful attention and they will have it. Naturally, it has been impossible to have that in the time that has elapsed because we have been extremely busy, as you will understand, in the case here, but I presume that before the Secretary decides this we will present some sort of a resume of the entire case for his consideration.

There is one point which was not covered by the reports of the Department and regarding which there has been no evidence. Some lady here, a very intelligent woman, asked that question and there is so far as I am able to observe, no answer, namely that due to the importation of these bulbs the narcissus flies, major and minor, and the *Tylenchus dipsaci* or *Doyenstatrix* which-



ever you wish to call it, have attacked through their introduction any other host crop or industry of the United States or of the agricultural interests thereof. Many experiments have been made upon that subject and some slight results in that way have been achieved, but there has been nothing shown that from this source anything of that kind has happened. I think that so far as the *Tylenchus dipsaci* is concerned or the eelworm that there is no authority under the sun of heaven higher than that of the gentleman who spoke to you yesterday morning, Dr. Cobb of the Department of Agriculture. There is not a scientist of Europe who does not take off his hat to Dr. Cobb as the Nestor, the chief authority with reference to nematodes that the sun today shines on in this world, and so far as that proposition is concerned we bow in submission to that authority and we will stand on what he says in his address and what he has written in his bulletins that are published by the Department.

With reference to the flies, there is no evidence. There is some dispute. The earliest authority which I have<sup>seen</sup>/in my researches was a report of a German scientist made in the year 1847, in which he said that a fly resembling the smaller fly, attacked onions and had done damage. However, there is no evidence that it does damage in Holland where narcissus and other crops are side by side, where they supply their own coun-





try and contiguous countries with onions, as does France and the United States, without injury from that particular crop. It would take a good deal of investigation to determine definitely whether there is an absolute identity between the fly which attacks the onions and the fly which attacks the narcissus. With your permission, I will call on the other gentlemen to do some talking.

Mr. Bickley, there was something you wanted to say. State it in as short a time as you can.

Mr. Bickley: I want to say something about the American bulbs that we have been trying at my place at Wallingford. I have had so c experience with these home-grown bulbs in the last three or four years. I have been unable to make any money off of them. Three or five years ago I got 35,000 iris from California, through a friend of mine who came to my greenhouse and wanted to sell them to me. He sent them to my place. I found that they were no good. I called him down to examine them and we had a talk over that. I told him that I did not intend to plant them because I would plant them at a loss. I thought more of my space in the greenhouse than to do that, to go ahead and experiment with these bulbs.

Mr. Vogelsang: Is that iris?

Mr. Bickley: Yes.



Mr. Vogelsang: We are talking about narcissus. 386

Mr. Bickley: I just wanted to bring this up. I shipped them back and I also placed an order with a firm out in Ann Arbor last year.

Mr. Vogelsang: Were they narcissus which you ordered?

Mr. Bickley: Yes. They were sent to me and I planted them. He had guaranteed 65 per cent to bloom. I keep an accurate record of everything I do and have done so for the last 25 years. I can go back and tell you just exactly what I did with the various things which I planted. I kept a record of these narcissus and I found that only 20 per cent of them bloomed. I immediately wrote to him. He answered my letter and we finally adjusted the matter to my satisfaction.

I also tried some bulbs grown down in Virginia some few years ago. They are very small and do not produce but very few flowers. The bulbs from Holland are guaranteed and they will bloom 150 to 200 per cent. (laughter from the proponents.)

Mr. Vogelsang: I think that he said something that is not understood. Mr. Bickley, when you say 150 per cent or 175 per cent or 200 per cent, what do you mean?

Mr. Bickley: I mean I will cut that many blooms off the bulbs.

Mr. Vogelsang: You mean that one bulb will have a number of blooms?



It is not as funny as it sounds.

Mr. Bickley: I further wish to say that the bulbs that I got in this country do not produce flowers such as I expected. When you are in the market growing in a commercial way you have to take those things into consideration. If you depend on the commission houses for your results and get anywhere from two to three dollars a hundred for your flowers you are going to be out of pocket.

Mr. White: I understood that you had closed your case and that at this session we were not going to discuss or bring up any new matters. Is this additional matter?

Mr. Vogelsang: My understanding is that we had the opening. You met our issue and we are merely rebutting what has arisen on account of your discussion. That is ordinarily done in any debate.

Mr. A. M. White: Quite a little appeared to be new matter rather than rebuttal. However, that is for the Chair.

Assistant Secretary Dunlap: Perhaps a little new matter has come in. The speakers from now on will confine themselves to matters which have been previously discussed.

Mr. Vogelsang: I will now call on Mr. Torchiana to say something. I wish to say that he is a citizen of California and that he is a descendant of a Dutch cowboy and has been for





35 years a citizen of that state and is a lawyer of the bar entitled to the highest respect of the bench and of the bar.

Mr. Torchiana: Mr. Secretary, gentlemen of the Board and ladies and gentlemen present, when the honorable, the Secretary of Agriculture, a member of the Cabinet of the President of the United States made a call for this meeting, and when the acting Secretary of Agriculture is presiding, every lady and gentleman entering the room may well feel confident that he is in the house of his friends and that he will be free from personalities. That is the way we have presented our side of the case. We would consider it an insult to the presiding officer here, to the gentlemen who are sitting with him as counsel, and to ourselves to indulge in any other mode of procedure, but, Mr. Chairman, it was left to the Congressman from California to break that rule; and still, I feel that I owe the gentlemen, in some respects, a debt of gratitude. However, I, myself, have heard certain whisperings which I would have scorned to answer except under these present circumstances. I have always tried to maintain the most courteous relations with the officers of the Government and I have always realized that these officers have sometimes an extra hard duty to perform, and no man in his common sense will deny that one of those duties is performed by the chairman of the Federal Horti-



cultural Board. Therefore, when three or four weeks ago I was granted a private interview with Dr. Jardine I asked the secretary of Dr. Jardine to at once telephone to the chairman, of the Board and ask the privilege of having an interview with him. This interview was granted for next morning and we discussed matters quite freely. Of course, Dr. Marlatt and I thoroughly disagreed as to policies and as to methods, but that in no way prevented us from having a courteous and friendly understanding. Dr. Marlatt asked me this question: He said that he had heard --- he did not say so in so many words --- that a certain fund which is generally called a slush fund, had been raised and he wished to know if I in any way was acquainted with the disposition of that fund. I answered Dr. Marlatt at that time that I did not know anything of such a fund, that of course doing business in the United States which is such a large country, becomes expensive on account of travelling and the time consumed to come from the west to Washington, taking about five days to come here and five days to return. And there are certain hearings, postponements, and not having the privilege of a Congressman who charges mileage to the Government and draws his salary at the same time, I was compelled to charge my clients a fee and expenses. I went further; I told the chairman of the Board what my fee was and I told him that I courted





an investigation at any time. (Applause from the opponents.)  
Dr. Marlatt, however, gave me the shock of my life, because/I<sup>after</sup>  
told him the amount of my per diem he said, "Well, you are  
cheap, compared to what the lawyers around here generally charge

Dr. Marlatt: This seems to be entirely a personal matter, but what this man says is absolutely untrue. I told him in a very jocular way that \$100 a day was nothing. I said, "You are a mere piker. Why, we have a man out on the golf links digging holes and filling them with sand and water, who gets \$150 a day." I did not mention lawyers.

Mr. Torchiana: That is correct. It was all said in a joke.

Dr. Marlatt: That is correct. There is no doubt about that.

Assistant Secretary Dunlap: Will the speaker please proceed and confine himself to the matter before us.

Mr. Torchiana: Now, the Congressman in making these statements, Mr. Secretary, stated, for instance, that there were 1500 acres of bulbs in California and that that was more than the whole acreage of the Netherlands. Of course, if the gentleman had any knowledge of bulb growing at all he would know that 1500 acres as grown under the American methods is not quite 500 acres as to volume of bulbs, as grown in the Nether-



lands. Therefore, 1500 acres is a very large overstatement. Still, if it were true, it would only compare as 500 acres to 2500 acres in the Netherlands. In other words, taking his own figures, the growth of bulbs in the Netherlands would be five times as much as in California, and not in California five times as much as in the Netherlands.

I heard also the statement that a great many people had refrained from planting bulbs in the United States on account of my statements. I did not know that my efforts had been so successful, and I am very glad to know that some of my clients are present to appreciate it.

But, Mr. Secretary, there is in the record a statement from the expert phytopathologist of the Netherlands. For the last  
/few years great improvements have been made in the Netherlands as to the famous hot-water treatment. The Netherlands scientists have before stated and truthfully stated that they had not perfected their system of hot-water treatment to such an extent that it was safe to apply this treatment immediately before shipment. I believe that all the experts on both sides of the case fully agree that this is the only method which gives absolute security. True, it involves large expense, for installation, drying, extra care and packing afterwards, but that is the only method which will give 100 per cent safety.



We have heard the gentlemen state this morning that California and the west demand the same treatment as will be accorded by this Board to the Netherlands. We gladly take up the challenge and, Mr. Secretary, the scientific expert who is responsible for this work and who is the father of this method, the method which is now employed in the United States, is here present. He holds himself at any time ready to confer with the experts of the Board to further complete this system and perfect it in such a way that there can be no question that it be effectively applied, and, in addition, Mr. Chairman, so that there can be no question as to discrimination.

The offer will be made that the United States Government will have on the other side of the ocean its inspectors to see that that work be carried out in accordance with their regulations and, furthermore, offers will be made that for each inspection a fee shall be charged which will be entirely sufficient to cover the whole expense of that service, that fee to be paid by the Netherlands exporter. (Applause from the opponents.)

Congressman Free: Will the gentleman yield to a question?

Mr. Torchiana: Yes.

Congressman Free: You visited various bulb growers throughout the United States, did you not?





Mr. Torchiana: Yes.

Congressman Free: You told them that you did not believe this quarantine would go into effect, did you not?

Mr. Torchiana: Over the whole United States I think I spoke not more than to six men. I visited the vast majority of all the fields. I spoke, however, only to six men, and I told them that unless there were continued importations of plant stocks that their efforts would come to naught.

Congressman Free: You are the consul general of the Netherlands?

Mr. Torchiana: Yes, sir.

Congressman Free: You were paid for that work?

Mr. Torchiana: Yes, sir.

Congressman Free: Who advanced the money for that pay?

Mr. Torchiana: My clients.

Congressman Free: And who are your clients?

Mr. Torchiana: The Netherlands Exporters' Association.

Congressman Free: Then, was there anything untrue in what I told here today?

Mr. Torchiana: Yes.

Congressman Free: You say there was something untrue?

Mr. Torchiana: Yes. You said it was a very large expense account. What did you base that on?



Congressman Free: On the statement you made to me yesterday, that you were getting \$100 a day with a big expense account.

Mr. Torchiana: I never said a big expense account. I said an expense account.

Congressman Free: What did you tell me?

Mr. Torchiana: I said an expense account.

Congressman Free: You said you were getting paid \$100 a day with a good expense account.

Mr. Torchiana: Not a good expense account, but an expense account.

Congressman Free: Of course, this gentleman being in the position of the consul general in the United States for the Netherlands and going about circulating these reports is only further evidence of what we have said here today. I would like to offer for the record a letter addressed by Mr. Harold A. Hyde under date of November 6, 1925, to Mr. George C. Roeding in regard to the visit of Mr. Torchiana to him and other growers of bulbs.

Assistant Secretary Dunlap: If there is no objection it will be received.

Mr. Vogelsang: Let us take a look at it, not that we wish to offer any objection to its introduction in the record,





but we would like to see what it is.

(The letter was handed to Mr. Vogelsang for his examination.)

(The letter above referred to reads as follows:)

"Following up our conversation this morning, the full name that you wished is H. A. Van Coenen Torchiana. He is now, and has been for several years, Consul General of The Netherlands for the Pacific Coast. I find that there is no photograph available here, but I am endeavoring to secure one from Santa Cruz and will mail it to you as soon as possible.

"About two years ago Mr. Torchiana called on us seeking information about bulb conditions. We told him that we were having good success with the propagation and growth of these bulbs and gave him no exact information with regard to quantity, varieties, etc., although he was very desirous of securing the same. He told us in conversation that he did not believe the embargo would ever be enforced and insisted that the Dutch growers were improving their methods and cleaning their stocks in such a way that the United States would not be able to exclude them on the grounds of disease any longer.

"We have been told that he made such representations to one or two of the growers this year; that they actually cancelled orders for propagating stock which they had placed in



view of his strenuous assertions that the United States Government had no intention of enforcing the embargo and that American growers would always be faced with Dutch competition. Am endeavoring to get this information first hand from the grower concerned and will get a letter to you from him if possible.

"If we can be of any further service to you in the matter be sure to call upon us."

Assistant Secretary Dunlap: I am trying to expedite this hearing. We might go on for a week, arguing backwards and forwards, presenting new material.

Mr. Vogelsang: Mr. Torchiana's remarks were made more or less as a matter of personal privilege.

Mr. McHutchison: wants to say something. I have asked him to be brief. I have no idea what his present statement is to be. I hope it will be very brief and will take but a very few minutes.

Mr. McHutchison: I have listened for a number of hours to professional abuse. Now, I want five minutes to say something.

Assistant Secretary Dunlap: You may have three hours, so far as I am concerned right now.

Mr. McHutchison: In opening the meeting yesterday, the chairman laid down what we consider very fair rules. He said that we must stick to the question of insect pests and that



there would be no personalities. I think every one will agree that we have followed that rule yesterday. There were no personalities. This morning, the gentleman from the other side, over in the Amen corner, brought out a good many matters. Of course, they have a right to speak. There were some good arguments there that ought to be listened to by the Department of Agriculture. I was particularly interested in what Mr. White said. They have a right to talk in their own way.

There were a good many things said with regard to personalities but I am not going to indulge in personalities. However, there were some charges made that should be explained, not with the idea of rebuttal. We are not lawyers, but we wish to explain to these gentlemen certain things because we have some facts which we understood were not to be allowed into this conference, but since the other side brought them up we would like to have them explained. We would like to have both sides known.

Now, with regard to the expenses of the American Bulb Dealers' Association, we have not taken one dollar from any one outside of the United States. Every cent that has been contributed towards our expenses has been contributed voluntarily. Our principal fee is the payment of a lawyer to see that our rights are protected at this hearing. The rest of the expenses is simply nothing. We have not drawn half the amount that has been voluntarily offered. You might ask why we have an attorney at





this meeting. We have had several hearings before the Federal Horticultural Board in the past, Department of Agricultural hearings, but, rightly or wrongly, we bulb dealers have not had a proper hearing in this matter. Now, as an example of that, I want to say that the chairman in the data supplied at the meeting yesterday said that this quarantine upon narcissus bulbs was up in May, 1918. That hearing in 1918 was with respect to quarantine 37. There was no particular reference to narcissus bulbs. Nobody is going to talk about something that is already free. Then, in the bulb conference in 1922 which was the other reason for it there was nothing brought up at that hearing. While I was in the hospital at the time, I have read all the reports and proceedings of it. As I read them, there was nothing brought up about embargoing narcissus bulbs. That was covered in our presentation yesterday. It is in so few words that I will quote from it. It reads as follows: "The announcement in December, 1922, that these bulbs would not be admitted for ordinary use after December 31st, 1925, came, therefore, as a sudden and unexpected (not to say unnecessary) action and were obviously predicated on other evidence than had been introduced at either the 1918 hearing or the 1922 conference." That is the reason, Mr. Secretary, and gentlemen, why we thought it would be advisable to have an attorney here to protect our interests. Now, we bulb dealers have been spoken of this morning as importers. Importing is only



one feature of our business. We are bulb dealers. I think every one of us handles American-grown bulbs, all kinds of American-grown bulbs that anyone may require. We will also handle American-grown narcissus bulbs if they are such as we can handle and the public requires them. We have no prejudice whatever against bulbs simply because they are grown in one place. We would sooner have American bulbs if it is possible to get them.

Then it has been said that we are indifferent to these bugs. We do not want bugs. If there are bugs coming in and it is necessary to shut them out we are willing for those bugs to be shut out. Our position is that if the Department is going to shut out narcissus bulbs, why shut them out. Don't allow one man to bring them in and prohibit another from bringing them in. Shut them all out if it is necessary to shut out narcissus bulbs. Stop the special permit business, because, Mr. Chairman, while we are all friends at noon, in the morning and afternoon we are friendly competitors. It is not right to stop shipments to one class and open the side door and let the same bulbs come in to another class of people. (Applause from the opponents.)

We heard this morning that the American bulbs would force just as well as the French Paperwhites or the Holland bulbs. Perhaps they may. However, many of us dealers have not only been experimenting in the growing of these bulbs for a number of years but we have also been testing bulbs grown by other people and





we have the results of those tests, Mr. Chairman. You will hear a great many Holland growers say that their bulbs are better than those of any one else. You will also hear some Americans say the same thing, that their bulbs are better than any one else's. But we have got the tests. I won't take up the time of this meeting to give those tests, except to explain a little about what Mr. Bickley said this morning, when the haha's went around. Mr. Bickley said that he got 180 per cent bloom out of his flowers. (Holding up picture) Those who can see this picture will see a French bulb with four flowers, producing 400 per cent. Right alongside of that picture are American grown bulbs without a single flower, nothing but grass. Now, that is an unfair picture. That picture of the French bulb is very much better than the average and the picture of the American bulb is very much worse than the average American bulb. We have seen good American bulbs. Let us be fair in these things. (Laughter on both sides.)

You have heard a good deal about Mr. Godbey. He deserves a great deal of credit. We have gone over his plantation, especially the Chinese lilies, but as to his Paperwhites I have to report here one little detail. The quality of flowers as compared with the French grown is 90 per cent as against 180 per cent of the same size French bulb. Here is another thing that is report-



ed: "Foliage uneven and grassy, too many small heads on inside of bulbs to produce flowers or good strong foliage." That is the trouble with these Florida grown bulbs. I think their climate is too wet. I went to Florida last year and made a pretty careful study of conditions down there and I think you will find your climate is too wet and you produce bulbs that are too sappy. I think you require the hardening process just when you get the rain, but that is for you gentlemen to decide who are putting your money into it. (Laughter from the opposition.)

We were asked this morning to stand by this quarantine that has been established three years ago. They said, "Gentlemen, this quarantine was imposed three years ago; now, it is going into effect January 1; stand back of it." Mr. Chairman, if that quarantine had been imposed in a fair way we would stand back of it. We feel now, Mr. Chairman, that you have given us an open, frank, fair hearing, and, if in the wisdom of the Department of Agriculture, it is decided to shut out narcissus bulbs, I, for one, won't do a thing against it, because I will have confidence in what the Department of Agriculture says. However, we have not had confidence, up to this time, because it has not been the Department of Agriculture but it has been the entomologists. I would not say a word against Dr. Marlatt. I think he is a fine man. He is so brainy that almost any big farm in this country



would be glad to pay him 25,000 a year for his services.

Dr. Marlatt: Thank you very much, but I am not in the market.

Mr. McHutchison: And, of course, no one questions his integrity. I have known him and have fought with him for 15 years. He has never converted me to his views and I have never converted him to mine. He is a zealot and, as I told him the last time I saw him, that is what makes him so darned dangerous.

Mr. Chairman, speaking to you as the Secretary of Agriculture, I wish to say that the mistake that has been made by the Department of Agriculture, I think, is to put an entomologist in charge of an administrative matter. (Applause from the opponents. You might just as well put an M. D. in charge of your immigration policy, a man that would see a disease on every man that came in and some kind of trouble connected with every handshake. (Laughter from the opponents.) When an entomologist looks at a plant he is not looking for the beauty of that plant like the Garden Club women, but he is looking for bugs, and he usually finds them, and he sometimes finds them when they are not there for the ordinary people.

It has also been said that we should stand by this three-year rule. Mr. Chairman, we are willing to stand by the rule of the Department of Agriculture but not by the rule of the Federal





Horticultural Board. That rule of the Department of Agriculture I read to you yesterday, which was made in 1911, before this Plant Quarantine Act was passed, where we were told that it would not interfere with business. Have not we got as much right to depend upon the statements of the Department of Agriculture originally made eleven or twelve years ago in preference to statements recently made by a single unit of the Department of Agriculture, made three years ago? (Applause from the opposition.)

Now, Mr. Chairman, I have got one more remark to make and then I am through. If it is shown to the satisfaction of the Department of Agriculture that these diseases that the Holland and the French and the Chinese narcissus bulbs are bringing in are detrimental to the horticulture or the agriculture of the United States and if a quarantine is in accordance with the law, which says that the Department shall only exclude them if those diseases are brought in not hitherto which are new to or/widely distributed throughout the United States --- If in the judgment of the Department of Agriculture it is best for the United States that those bulbs should be shut out, I say, shut them out, but do not allow the side door to be opened so that they may come in for somebody else to be used for planting stock. There is not any difference between planting stock and forcing stock. The bulbs we have sold this year for planting purposes have been the double-nosed, No. 1, the best you



can get, because they have so many more heads on them. There is no difference between forcing and planting stock. They are exactly the same. Some gentlemen this morning were talking about the wonderful developments that have been made in connection with home-grown bulbs. Well, if there is so much disease coming from Holland and France, then, they must have them all plus the multiplication since those bulbs came in. If it is necessary to shut out from our regular source of supply those bulbs, by reason of the disease, shut out the other source too. If we are not to have diseased bulbs from Holland and France we also do not want diseased bulbs from California or from Florida any more than we want them from France. (Applause from the opponents.)

I wish to have inserted in the record, without reading it at this time, a letter from McHutchison & Company dated February 7, 1925, and addressed to Messrs. E. A. Hyde Company, Watsonville, Calif., which gives the reports showing the results attained by growers in connection with homegrown narcissus. I also wish to have inserted in the record, without reading it at this time, a letter addressed by McHutchison & Company, under date of January 21, 1924, addressed to Mr. T. K. Godbey of Waldo, Florida. There is also here our letter, under date of October 20, 1924, addressed to those American growers to whom we shipped the bulbs, referred to in the two previous letters, for the pur-





pose of ascertaining what could be done with these American grown bulbs.

(The letters above referred to, in the order named, are shown below:)

"Messrs. H. A. Hyde Co.,

"Watsonville, Calif.

"Gentlemen:

"The 5000 Paperwhite bulbs you shipped us last fall cost us .22.10 per 1000 delivered here, they were fine looking bulbs, about 15 c/m, and as agreed we delivered 500 to each of 10 of our best forcers who had also bought French Paperwhites asking them to report results. We made no charge for the bulbs as we wanted fair reports - we enclose copy of our letter to them. Here are the reports:-

"No. 1. 'In accordance with your request, wishing us to advise you our findings on the U. S. grown Paperwhite Narcissus you sent us last fall for trial, we herewith report our findings:-

Flower heads are about one-half as large as the French grown.  
Height of stem about fifteen (15) inches.  
The variety was mixed with Chinese Sacred Lily Bulbs.

It seems to us that the bulbs lack vitality and that by comparison with the French stock, it is our opinion, that they are about sixty



per cent as good.'

No. 2. 'Referring to the U. S. grown Paperwhites you sent us, only 60-75% bloomed; only 50% of the blooms were of commercial value, the others too light - only 3 or 4 florets each. Stems and foliage very thin and weak, no substance to flowers. Varieties of Narcissus other than Paperwhites were mixed in with them - bulbs seem to be split too much. In my opinion they are valueless to the trade.'

No. 3. 'The American grown Paperwhites you sent us were very slow in coming into bloom; they flowered about 70% but the blooms were small and they were later than the French grown. The French grown bloomed about 90% and the blooms were larger. These are very poor when compared with the French grown bulbs.'

No. 4. 'The 500 U. S. grown Paperwhite Bulbs you sent us to try out were planted at the same time in flats as the French grown, both were grown under exactly the same conditions and here is our report of flowering results on both lots:-



Size	<u>French grown</u> 13-15 c/m	<u>U. S. grown</u> 15 c/m	407
Bulbs per flat	66	50	
Date planted	Oct. 28th	Oct. 28th	
Ready to cut	Jan. 12th	Jan. 20th	
Percentage sal- able spikes	118%	60%	
Percentage un- salable spikes	none	20%	
No. of florots per spike	8 to 23	4 to 8	
Quality of flowers	good	poor	
Keeping qualities	good	no keeping quality	

The French were of true Grandiflora type, the U. S. grown were badly mixed, some varieties we could not identify, but were worthless. The enclosed photos were taken Jan. 10th and plainly show the difference.

The U. S. grown split into several non-flowering shoots, though the bulbs were large and looked fine and promising. It would not pay us to force the U. S. grown even if they cost nothing, cannot get enough out of them.'

No. 5. 'You sent us 500 American grown Paperwhites, asking us to report flowering results. The bulbs looked to be of splendid size and quality, but before planting them I cut several open and saw they had hardly any flowers in them. I did not want to inform you then of my findings, but now when they have practically done blooming I would advise you, if you have any money in the enterprise to get out from under as soon as possible. The 500 bulbs only brought 240 flowers, fairly good blooms, but nothing like the French, not enough flowers





to the truss. The California bulbs have 4-7 flowers per truss compared with 8-16 on the French; the California bulbs have only one spike, or none, while the French have a large percentage with 2 or more spikes; the California bulbs have about 50% of the vitality of the French - they grow half as tall.

These brought only 50¢ to 75¢ per dozen, the rest of flowers have only 3-6 florets to a stem, of uniform size. French grown brought \$1.00 to \$1.25 per dozen flowers. Further I have to report the U. S. grown are only 75% true to name, about 5% of yellow eyed petals, while 20% are similar to Paperwhites but are of a silky texture, sulphur tinted; petals are undesirable shade of colors and flowers are unsalable - being too poor.

My conviction is, whoever grows them has not proper soil to grow them in - too rich and wet at the time of blooming.'

"No. 6. 'In reference to the 500 United States grown Paperwhite Grandiflora that were shipped to us on Oct. 20th.

These bulbs were planted upon arrival and treated exactly the same as the French bulbs that were purchased from you. If anything, they had a little longer rooting time before they were forced.

We found that they did not make their growth as rapidly



as the French, but in the end they were in flower at the same time.

In all we cut 8 dozen special or top size flowers, 13 dozen second grade, 1 dozen third grade (which are practically worthless) and 1 dozen of an inferior yellow Narcissus. In other words about 50% salable flowers.

The flowers were composed of about six and possible eight bells, whereas, the French ran all the ways from ten to twenty bells. Your French stock gave very good results. For your comparison must say that out of the 100 cases of Paperwhites purchased we cut 9817 dozen salable flowers.

Hoping that this report covers all that you would like to know, I am'.

"No. 7. 'Referring to your letter of the 24th in regard to U.S. grown Paperwhites, We make the following report:-

Number of blooms cut....325

Size of spikes  $3/4$  inch in diameter

Length of stems - 12 inches

Number of flowers per spike - 8

One flower to each bulb

Time for planting to flowering - 8 weeks.

"No. 8. 'In reference to the United States grown Paperwhites, we are cutting the first today so that you will note there is no undue forcing.





The flowers are not quite as large as the French grown bulbs. They are very much more irregular and there are a number of wild ones among them. So all in all if we could get the French ones we would not use the American grown.'

"No. 9. 'On your California Paperwhites, we planted 428 and cut 19 dozen on 228. The percentage is far below French stock. They do not seem to have the strength and run mostly to splits also the petals are smaller and not as many'.

"No. 10. No reply received yet from him - have written him 3 times.

"Considering that your bulbs were 15 c/m and the French were in most instance 13 c/m, the reports on your bulbs are not favorable. The strongest test of course would be on those forced early, but yours did not come early enough for that purpose. Yours were much larger and better looking than the French, but instead of throwing up 1 or 2 flowering shoots they throw up 3 or 4 non-flowering shoots in many instances. Yours came irregularly, and took 3 or 4 weeks more to bloom than the French - which of course is much against them considering the cost of coal and greenhouse space.

"While these gave better results than your bulbs which we tested before, and while they gave better results than several other lots of U. S. grown we have tested in recent years, consid-



ing the cost of coal and labor and delivery, it is doubtful if the forciers could afford to handle such bulbs - as assuming that your bulbs would cost here about double the French, or \$34.00 per 1000, the grower would have to get at least 4 times what he now gets for the flowers to break even.

"Yours truly,

"McHUTCHEISON & CO.

"P.S. We can give you the names and addresses of all above growers if you require them."

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"Mr. T. K. Godbey,

"Waldo, Fla.

"Dear Sir:-

"With regard to the 500 Narcissus Paperwhite Bulbs you invoiced Aug. 9th, you will remember we promised to place these for testing purposes with some of our best forciers and to advise you of results when known. Having now received reports we give them as we received them, as follows:-

"Valentin Burgevin Inc., Kingston, N. Y., reporting on 100 bulbs writes:- 'We intended to advise you a few days ago, being unable to do so at a prior date, regarding the Florida grown Paperwhite bulbs you sent us for trial. We regret to advise you that these bulbs are not nearly so satisfactory as



the imported ones. They come in bloom unevenly, some come blind and the texture of bloom being mostly small and weak. There were a few fair size blooms, but the majority were poor and the individual flower smaller. Summing it all up, we would say that the bulbs lack vitality, and our judgment is that they are only about sixty percent as good as the French grown'.

"Frank Edgar, Waverley, Mass., reporting on 100 bulbs writes:- 'In reply to your inquiry of Dec. 13th, I can now give you forcing results of the Narcissus Paperwhites, Florida grown, of which you sent me 100 bulbs for comparison with the French grown, when forced.

Quantity of flowers about 90% as compared to 180% on same size of French.

Foliage uneven and grassy, too many small heads on inside of bulbs to produce flowers or good strong foliage.

Mixtures, about 15% in two worthless varieties.

Flowers come unevenly, not together as the French.

Type seems to be true Grandiflora, but the flowers are smaller and of inferior color to the French.

Stems too weak to stand, due to weakness in foliage probably.

The bulbs looked good, they were large and sound and

I expected excellent results from them, and are sorry I cannot give you a more favorable report on them. With coal and labor and delivery costs so high I could not afford to handle them at





any price, though I can understand they might give much better results in southern greenhouses.'

"Wm. H. Siobrecht, Astoria, N. Y., reporting on 200 bulbs, he refused to write but reported over the telephone 'They are a bunch of tall thin leaves and the flowers are very small. These Florida grown bulbs are not to be compared with the French grown.' Told him to put it in writing but says it will be a week or two before he can do so as this is his busy season.

"Arthur R. Addy, Brooklyn, N. Y., reporting on 100 bulbs; he refused to write, but over the telephone said 'My heating plant broke down last December so those bulbs have been grown naturally, not forced. The Florida bulbs are producing flowers which are considerably above the foliage, which makes it bad for cutting, the foliage is not good. I may get about 60% flowers, but cannot tell at this time.'

"These reports are almost the same as we have been receiving on tests for the past 4 or 5 years. Your bulbs were sound and looked as if they should produce excellent results, though you will remember that several you cut open had no flowers in them. These reports confirm what we told you at the time, that the U. S. grown Paperwhites will not produce results under forcing conditions with those who use them in quantity.

"These reports do not mean that you are not making a suc-



cess in growing Paperwhites there, but it shows to us that they should not be sold for forcing purposes in cold latitudes. For open ground planting, or for growing in greenhouses in southern or mild climates, we think they would be quite suitable, also for supplying the very large department store and 5 and 10¢ store trade - where they do not have to stand the test imposed upon them by hard forcing conditions in northern greenhouses.

"While these reports, coupled with what we have ourselves seen, prevent us from entering into the contract we talked about on production, we would like to continue to buy a quantity of your Paperwhites each season - especially if some new culture or method warrants the belief that they will give better forcing results.

"Yours truly,

"McHutchison & Co.

"P.S. We thought you might be interested in the enclosed photo; the single bulb with four flowers is French grown, while the other having no flowers are California grown."

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"Dear Sir:-

U. S. grown Paperwhites

- "By express today we shipped you a box containing 500 U. S. grown Paperwhites as per memo invoice enclosed, which we ask you to grow under the same conditions as the French, keeping





them separate and advising us of results when known.

"These are fine looking bulbs, they are claimed to be properly ripened and should give equally as good flowering results as the French grown under the same conditions. We particularly want to know the percentage of flowers per bulb, the size of spike, and number of flowers per spike as compared with the French, also their value by comparison.

"We have put a good deal of money into the production of these bulbs in this country in view of the fact that the F.H.B. embargo on imported bulbs comes into effect after next season, so please give this test your personal supervision so that you can make us a definite report of flowering results later on.

"Yours truly,

"McHutchison & CO."

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Mr. Richter: I want to reiterate a statement I made yesterday. It was to the effect that we were trying to support the American bulb industry. Mr. Weiss made a charge this morning which I would like very much to answer. I do not know how many of you have been over Mr. Weiss' bulb or narcissus plantation. I have been there three times. The most I could see was a very weedy growth. We several times tried to get bulbs from him and we were not successful. The bulbs he referred to that



we did get were from Portsmouth, were from his brother. In 1922, through one of our salesmen, his father, who was then living, and his other brother, asked us to furnish them with a certain quantity of narcissus stock. One was Dutch and the other was French. The French was shipped to some point near Wilmington, N. C. The Dutch was sent down to the outskirts of Portsmouth. The brother told me the following year that he was obliged to give up the planting of Paperwhites which he had made, that there was nothing coming from them. I have with me a few of the bulbs if anybody wants to see them. At that time they said, "We cannot very well pay for these bulbs at this time in cash but we will make a contract with you for you to take the product." Naturally, that was a sort of an obligation on the part of both of us. We had to have some means of getting our money back by taking this product. This is the second year that they have made shipments to us. These bulbs come to us absolutely very much infested. We cannot keep them in the original boxes like we do the Dutch or the Holland or the French stock, but we are compelled to put them out on the ground, and almost every day we have to go over them and pick out the decayed bulbs. The settlement on a credit basis made so far with his brother will show the number of bulbs last year which we had to discard, and when we make our credit this year it will wind up the transaction. It will be the last one



of that kind that we will get into. The records of our transactions, as I said, will show the number of bulbs that we had to throw into the discard, to which adjustment he always agreed. I have been over the plantation when they were in their full glory --- I mean the brother of Mr. Weiss here, as he succeeded his father -- and the flowers are rushed into the various markets a few days before Palm Sunday. I do not know about the bulbs but the flowers are rushed into the market and kept in cold storage.

I have also been on the farm of Mr. Weiss who is here, and I do not see how it is physically possible for him to use or care for a quantity like 50,000. There is no use of him talking about millions to those who have been down there and who have seen the conditions. I have also been on the various other farms he referred to. One man told me that he does not know one thing from the other. He told me so with his own mouth. Mr. Weiss will recall his name. He is a very wealthy real estate investor down there.

Now, as to Mr. Godbey, Mr. Godbey has been very anxious to sell us some Chinese narcissus for a number of years. We have tried him a good many times, and since the embargo rather loomed up as a possibility we went into the actual testing of the bulbs, because on the surface the bulbs do not show any-





thing as to their value. I have before me the figures. He shipped us 4,000 Chinese Lily bulbs or narcissus that we received in May, 1924. I did not plant them at once, because, as any one knows, any one who knows bulbs, you cannot force bulbs almost immediately after they come out of the ground. They have to go through a curing stage. There were four sizes of bulbs. We figured out the results. One of them had a flower on it. The balance of the bulbs were absolutely blind.

It may be further stated, although I have not the facts here with me, that I saw an ad in one of the trade papers within the past few months from which it appears that Mr. Godbey wants to sell his farm. Why he wants to sell his bulb farm I do not know.

Mr. Chairman, I want to repeat what might have been said before. If the Department of Agriculture wants to shut narcissus out because they are a menace we are agreeable to shutting all of them out, planting stock and all. There is not any difference, so far as the classification of diseases is concerned, between them (Applause by the opponents).

Mr. A. L. Miller: I believe I am a good citizen of the United States. Our business is to force winter-blooming plants at Jamaica, Long Island. Our market is New York City. We force bulbs only in small quantities in pans and pots, and I will say



right here that we make very little money on them. We grow them in order that we may have a complete collection, in order to help the sale of other plants. When we buy these bulbs we do not examine them to see what bugs are in them. All we care is what they will do, what they will produce. Now, if they produce flowers we can sell them. If they do not we cannot sell them. Now, as far as I am concerned, I don't care where the bulbs come from. Of course, I would prefer to see them come from the United States, but from my experience and from what I have heard and read and judging by the samples which I have had the bulb business, the growing of narcissus in this country, is in its very, very infancy. As most of these gentlemen have stated, they have been growing them for one year, for two years or for three years. In Holland they have been at this game for generations and I think they are very careful in selecting good clean stock to send to the United States. If the stock does not pan out all right they know what is coming to them. They know that they are not going to be paid. If we have to depend on home-grown stock and buy the bulbs under those same conditions I wonder what the American growers will say? They do not guarantee their bulbs. The Hollanders will guarantee their bulbs to a certain extent. It appears to me that we are going to be the goat. Somebody has got to pay this bill and if there is an





way at all that they can do so they are going to make us pay that bill. Furthermore, Paperwhite narcissus are grown principally for cut flowers and are forced in the dead of winter, in January, February and March, when cut flowers are very scarce and the collection is limited. There are a good many people who make a living out of growing Paperwhites for the market and they do not make much of a living at that. On the other hand, it is the only flower that a person with a moderate pocketbook can get during those months when he wants a few cut flowers. If you go to a florist's shop and want to buy roses and get any kind of a decent looking bunch you have got to pay a good, stiff price.

I believe one of the most essential things in this country is to educate the poor people to love horticulture and to educate them to love flowers, plant gardens, and so forth. They tell me that in Oregon and Washington every back yard is full of hyacinths, tulips and narcissus and all that sort of thing. They have plenty of them at that time of the year, when they grow outdoors, but that is not the time when a great many florists make their living out of flowers. The public wants them most in the winter time when they cannot grow them in the back yard. I think that this meeting has forgotten all about that end of it.



Mr. Vogelsang: If the Chair will permit it, I would like to call on Mr. Grullemans for a few remarks.

Mr. Grullemans: A great deal has been said about the danger to agriculture in connection with the importation of narcissus. By the way, you will pardon me for not speaking louder, but I have just recovered from an illness and, perhaps, really should not be here. Very little has been said as to damage done to horticulture and especially hardy plants. For the last five or six years we have planted in our nursery all the surplus bulbs that we had left over and they were mostly narcissi. As far as I am able to determine, we have never found any damage done to any hardy plants grown in our/country. I am not an entomologist and I am not ready to say that there is no damage done but we have not found any in our nursery and our nursery is open for inspection at any time./ I have to say. (Applause from the opponents.)

Assistant Secretary Dunlap: Are there any others?

Mr. A. Van Rooyen: Mr. Vogelsang, do you wish to ask me some questions?

Mr. Vogelsang: You may state your name and business, Mr. Van Rooyen. I have never met you before. I do not know, as a matter of fact, what you do know.

Mr. Van Rooyen: I represent Tegelaar Brothers, Incorporated.



ated, of New York.

Mr. Vogelsang: What experience have you had in handling bulbs?

Mr. Van Rooyen: I have had experience growing bulbs on the other side. That is all I can tell you.

Mr. Vogelsang: Have you had any experience growing them here?

Mr. Van Rooyen: Not very much, no. I have not grown them very much. I have grown them <sup>for</sup> ~~a~~ year or so. I cannot say that I have grown them very much.

Mr. Vogelsang: Have you imported bulbs from abroad?

Mr. Van Rooyen: Yes, we have.

Mr. Vogelsang: Is that your business?

Mr. Van Rooyen: Yes.

Mr. Vogelsang: In quantity?

Mr. Van Rooyen: Yes.

Mr. Vogelsang: How do you find them as regards infestation?

Mr. Van Rooyen: We ship them out all over the country the same as all other bulbs are shipped. I cannot tell you.  
(Laughter from the proponents.)

Mr. Vogelsang: I am asking you as to their condition with regard to infestation with pest or diseases.





Mr. Van Rooyen: We find the stock coming in is very clean, as clean as they can possibly be grown anywhere. I think that the stock sent out by Holland receives a thorough examination and I believe they arrive here in as good shape as they possibly could arrive from any other section.

Mr. Vogelsang: That is all, I think.

I wish to repeat that Dr. van Slogteren is with us and if there are any questions which you would like to ask him with regard to methods of eradication and to methods of treatment of bulbs previous to their importation into this country I would be very glad to have you ask him such questions as you desire to put to him.

Mr. Burdett: I wish to make a statement in reply to a personal attack made on me this morning. I do not know whether it was intended to be an attack. Mr. White has made some very wild and untruthful statements. Perhaps he did not know them to be untrue. Nevertheless, he made no effort to ascertain their truth, and I wish to reply to them.

I appear here as the representative of Vaughan's Seed Store and have so appeared at every conference held by this Board on the subject of bulb embargo. I distributed to the newspapers certain press matter which Mr. White referred to and in connection with which he paid me compliments with regard to editorial



ability, and I did that without compensation. The expenses of that distribution were defrayed but I received no compensation for my part in it. My interest therein was the interest of my employers and my own personal interest as an amateur horticulturist. I am a professional writer and not a professional horticulturist.

Vaughan's store, as Dr. Marlatt well knows, has been an opponent of embargoes laid down by this Board from the very beginning, and its opposition is not based on any personal interests. It is based upon principle. They have opposed the policy and the philosophy of blanket embargoes and they have opposed those embargoes even when they were profiting as a result of those embargoes. This concern is one of the largest growers of American bulbs. I believe it is the largest individual grower of gladiolus bulbs, and I stated, with the authority of Mr. J. C. Vaughan, at the hearing on the bulb embargo that this firm favored the abolition of the embargo against gladiolus bulbs which it then grew in quantity. In the beginning this embargo that we are considering today was a blanket embargo. My opposition was as to the entire list of bulbs of which seven, we have been told, have been found by the investigations not to be a menace, not to be infested, and I would call attention to the fact that out of eight bulbs which this amendment originally covered and which were to be





barred out of this country and denied to the gardeners of this country, seven are now admitted not to be a menace. It would therefore appear that the percentage of error in connection with this order was  $87\frac{1}{2}$  per cent.

I wish to say also that neither I nor my employers are opposed to the American production of bulbs. We favor American production of bulbs. I understand that Mr. White is not a horticulturist. He has not been present at former hearings. His interest in bulb growing is of very recent development. I am told that he is a banker and that he went into this matter to protect the industry. Now, Mr. White, as a banker, would not advise a client to buy bonds concerning the validity of which good lawyers had expressed doubt. He would not advise his clients to buy securities which could only be collected after a lawsuit, and yet all of these gentlemen who have appeared here and asked for protection for investments entered those investments with the understanding that whatever protection they had in it was of a very flimsy character. However, I have the greatest sympathy for them. I think they deserve sympathy and I wish to volunteer, Mr. White, that I will <sup>give honest</sup> my services in endeavoring to obtain for your American bulb production honest and legal protection in the form of a tariff, and I think that perhaps you will need help because I believe that protection by the way of an embargo is illegal.



Mr. White: If the gentleman will yield I would like to make a statement. Mr. Burdett's remarks were addressed rather directly to me. He said I had been guilty of several untruthful statements. Will you say what they were?

Mr. Burdett: Your statement with regard to your estimate of the enormous funds expended in our campaign.

Mr. A. M. White: Did I charge that to you? I was speaking of the campaign in general.

Mr. Burdett: I understood that you referred rather directly to me.

Mr. A. M. White: You have evidently made a mistake.

Mr. Vogelsang: I only wish to say further that Dr. van Slogteren will be glad to make an appointment with any of the experts of the Board tomorrow or the day after in connection with the discussion of any phase that may be beneficial.

Assistant Secretary Dunlap: I will give the Doctor a personal invitation to visit not only that bureau but to visit any other.

Mr. Guille: Mr. Richter, you told us of the poor forcing results revealed by certain tests. Did you include in your tests a sample lot of Florida grown Paperwhites supplied to you by F. Rynveld & Sons of New York?

Mr. Richter: Yes.





Mr. Guille: Some time after the tests of these bulbs were complete did you enter into a contract with that firm for the purchase of a variety of these same bulbs for delivery next season?

Mr. Richter: Yes, but not on the basis of a test.

Mr. Guille: Is it not then reasonable to assume that the bulbs were satisfactory?

Mr. Richter: Not at all.

Mr. Guille: Does not the Michell Company intend to handle good bulbs?

Mr. Richter: We hope to, if we can get them. May I qualify my answer? I stated before that we have been for three years trying to support the American bulb-growing industry. By that I mean the narcissus industry. You can't expect, as a man said at one time, to go into a mine and get pure gold out of every ton or pure iron out of every ton of material that you take from the mine. You might get an ounce of gold out of a whole ton of material. You might order a hundred thousand narcissus and get 25 per cent to flower. These are chances which we are willing to take. We are told to be good sports. I think we have been good sports in order to try and see what this industry will do.

Mr. Guille: Mr. Bickley, will you answer a few questions?

Mr. Bickley: I will answer anything you want.





Mr. Guille: You are a very large forcer of daffodils?

Mr. Bickley: Yes, and I have been for the last 20 years.

Mr. Guille: And you buy from a lot of dealers?

Mr. Bickley: I have been doing so for some twenty years.

fairly

Mr. Guille: They are ~~much~~ well represented in the hall

here. Can you indicate any one of the dealers here who has been liberal enough to guarantee to you this 175 per cent of blooms?

Mr. Bickley: No. When I buy the bulbs I have the guarantee on the order.

Mr. Guille: Have you any orders with you?

Mr. Bickley: No, I have no orders with me.

Assistant Secretary Dunlap: Are there any others to speak

Mr. Richter: I wish to say when we placed this order to which I referred, it may be interesting to tell these people here that we were requested to give cash in advance for approximately half, I think, last year, and I think half the early part of this year. The bulbs, of course, we hope to get next year. It is a very unusual procedure in the bulb industry. I asked them if they would guarantee them and the head of Mr. Guille's firm made the verbal statement that absolutely they would not guarantee them. He said, "We will either deliver the bulbs or refund the money." He said, "We will deliver the bulbs, but as to guaranteeing the flowering results, no." I had some written corre-



spondence with Mr. Guille in which I asked that question. I told him that, as he well knew, you could easily place an order for 100,000 Paperwhite narcissus, French grown, and you could get a guarantee that they would bloom. He did not refute that, but he seemed to think that it was a different situation with the American grown stock and he would not guarantee them.

Assistant Secretary Dunlap: Before we go any further I would like to know if there are any ladies present who have anything further to say.

Mrs. Pratt: Thank you very much, we have nothing further to say.

Assistant Secretary Dunlap: Is there anything else before we close?

Mr. Brown: Referring to the charge that Mr. Godbey's bulbs are worthless, I would like to say that I have known Mr. Godbey for a good many years, about a dozen years, I should say. I have frequently visited his farm and I have seen his plants in bloom in the field for several months during the season. I have found them to be very vigorous plants, blooming well, although I am not a professional florist and could not tell you the various varieties. As I go home from Mr. Godbey's I have frequently gone through the shed with him and <sup>I have</sup> said to him, "I want a handful of this and a handful of that for my wife and I want this for the





little girl," because they love those plants just the same as those who have spoken today. I would put them in my pockets, take them home and force them. They would make just as beautiful blooms as the flowers I have seen from the imported stock. My wife has been buying those things ever since I have known her as a little girl seven or eight years of age.

I do not want to see Mr. Godbey's judgment questioned. It has been said here that he is contemplating selling his farm or part of it. It should be stated here that Mr. Godbey is nearly 80 years old. He does not expect to take that farm with him when he leaves Florida. (Laughter from the opponents.) For the benefit of the ladies I wish to say that I hope they will all get as good narcissus as Mr. Godbey raises, whether they be grown at home or imported from abroad.

Assistant Secretary Dunlap: Is there anyone else to be heard?

Mr. Pierson: In 1922 the Department stated that it would be the object to make the country independent of the foreign importations of plants. Is that true? Now, I am a 100 per cent American. If the plant growing interests of this country need protection it should be by way of a tariff but that protection should not parade under false pretenses. I repeat that if they bring in insects injurious to American agriculture or horticulture, why keep



them out; if not, they should be admitted entry. (Applause from the opposition.)

Assistant Secretary Dunlap: For your information I wish to state that the Secretary or the Department has received about two hundred communications for the quarantine and about the same number practically against this proposition, so that you may know that the Secretary has quite a little before him.

Dr. Marlatt: That is in addition to what has been offered here.

Assistant Secretary Dunlap: In addition to what we have said here in the last eight hours and 35 minutes, during which time we have been in session, and the material that has been submitted. I do not believe that any of you will envy the Secretary his position for the next few weeks, at least, while he is considering this and a multitude of other matters which come up daily before him.

I wish to make an announcement to the effect that the American Horticultural Society will meet either in this room or the one immediately to the left tonight at 8 o'clock. Among the speakers will be Mr. Roeding of California.

Mr. Vogelsang: I wish to state that as soon as we get a copy of the record we expect to make a resume for the Secretary which I suppose will be in the form of a short brief.



Dr. Marlatt: It might be stated for the persons in attendance interested in the record that the Department is not in the habit of copying 800 or more documents. They become a part of the file and record which is presented to the Secretary or whoever makes the decision. The record will consist of such material as has been distributed by the Department, such as these general statements which have been distributed here and a complete record of everything that has been said on the floor at this conference, together, perhaps, with certain papers which have been offered. It would be absolutely impossible within almost an excessive time to make a complete transcript of all these voluminous documents, books, and pamphlets which have been submitted here. It would be a library in itself.

Mr. Vogelsang: I desire to say that yesterday in presenting what I did from the platform I refrained from reading, in the interest of expedition, several papers, not very long, but extracts of scientific statements, that we consider very important in our case. So far as the introduction of matters like the pamphlet on constructive criticism, I do not believe it is necessary to put that in the record. We have offered several petitions. While I believe the subject matter of those petitions should be put in the record it is not necessary to copy all of the names of those people who sign those petitions. There might





be named one or two and then it might be stated there were so many others. I have made an engagement, at least tentatively, with the reporter to sit down with him, as soon as we can get a chance, and go over with him and decide just what I would like to have made part of the record. I think we can safely say that we will not unduly burden the record.

Mr. White: I might say that I have also the same kind of an engagement with the reporter. I want to say also that in this black folder there are a number of letters, photographs, and other articles which we will submit for the Secretary's consideration which need not be copied into the record.

Assistant Secretary Dunlap: That is quite agreeable.

Mr. Richter: Before closing, I want to express my personal thanks to the chairman of this conference for the very masterful and efficient way in which he has conducted it. I believe that I express the feelings of everybody here. (Applause from both sides.)

Assistant Secretary Dunlap: As I told you in the beginning, I have not had any great amount of experience in presiding over meetings, and I feel that if we had a good meeting and have had a good presiding officer it is because you have co-operated with me to the fullest extent, and I assure you that this report will be handed on to Secretary Jardine, and he will



in due time act upon it.

If there is nothing further we will consider the conference adjourned. (After a slight pause) The conference will stand adjourned sine die.

(The conference adjourned at 5:45 p. m.)















